RAILWAY AGE

NOV 4 1948

OCTOBER 30, 1948

In the rebuilt CNW hopper cars

BYERS WROUGHT IRON Airbrake Piping

A century of railroad experience dictates the operating practice of the Chicago and North Western Railway . . . and gives increased significance to its extensive use of wrought iron. One recent typical application—in a number of rebuilt hopper cars—was in air brake piping.

The tiny threads of glass-like silicate slag that are distributed through the body of high-purity iron, give wrought iron a structure like a stranded wire cable. Because of this, the material has unusual ability to withstand continuous vibration without the premature fatigue-failure that is a major cause of brake pipe maintenance when ordinary materials are used. In addition, wrought iron has excellent forming properties, can take the short-radius bends required in AB brake installations, and is free of "spring-back", which simplifies fitting.

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ELECTRIC FURNACE QUALITY ALLOY AND STAINLESS STEEL PRODUCTS

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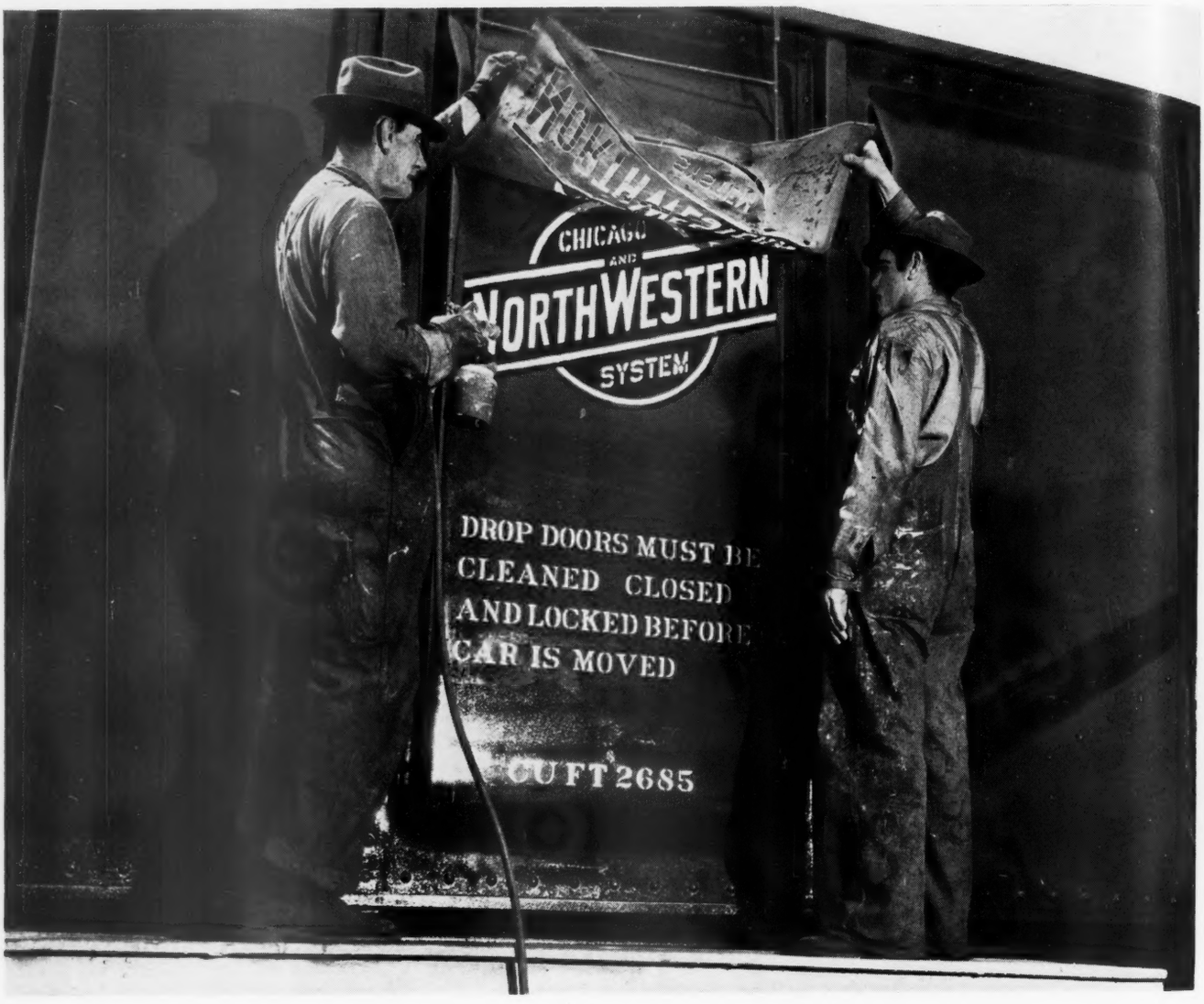

Congratulations to the Chicago & North Western Railway on the completion of a full century of valuable and honorable service to the great Middle West

UNIT TRUCK CORPORATION NEW YORK

Published weekly by Simmons-Boardman Publishing Corporation, Orange, Conn. Executive Offices, 30 Church Street, New York 7, N. Y. Entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price $6.00 for one year. U. S. and Canada. Single copies, 50 cents each. Vol. 125, No. 18.

Vol. 125, No. 18 October 30, 1948

RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office.

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Published each Saturday by the Simmons-Boardman Publishing Corporation, Orange, Conn., with Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 105 W. Adams Street, Chicago 3, Ill.

Washington 4, D. C.: 1081 National Press Building—Cleveland 13: Terminal Tower—Seattle 1: 1038 Henry Building—San Francisco 4: 300 Montgomery Street, Rooms 805-806—Los Angeles 14: 530 West 6th Street—Dallas 4: 2909 Maple Avenue.

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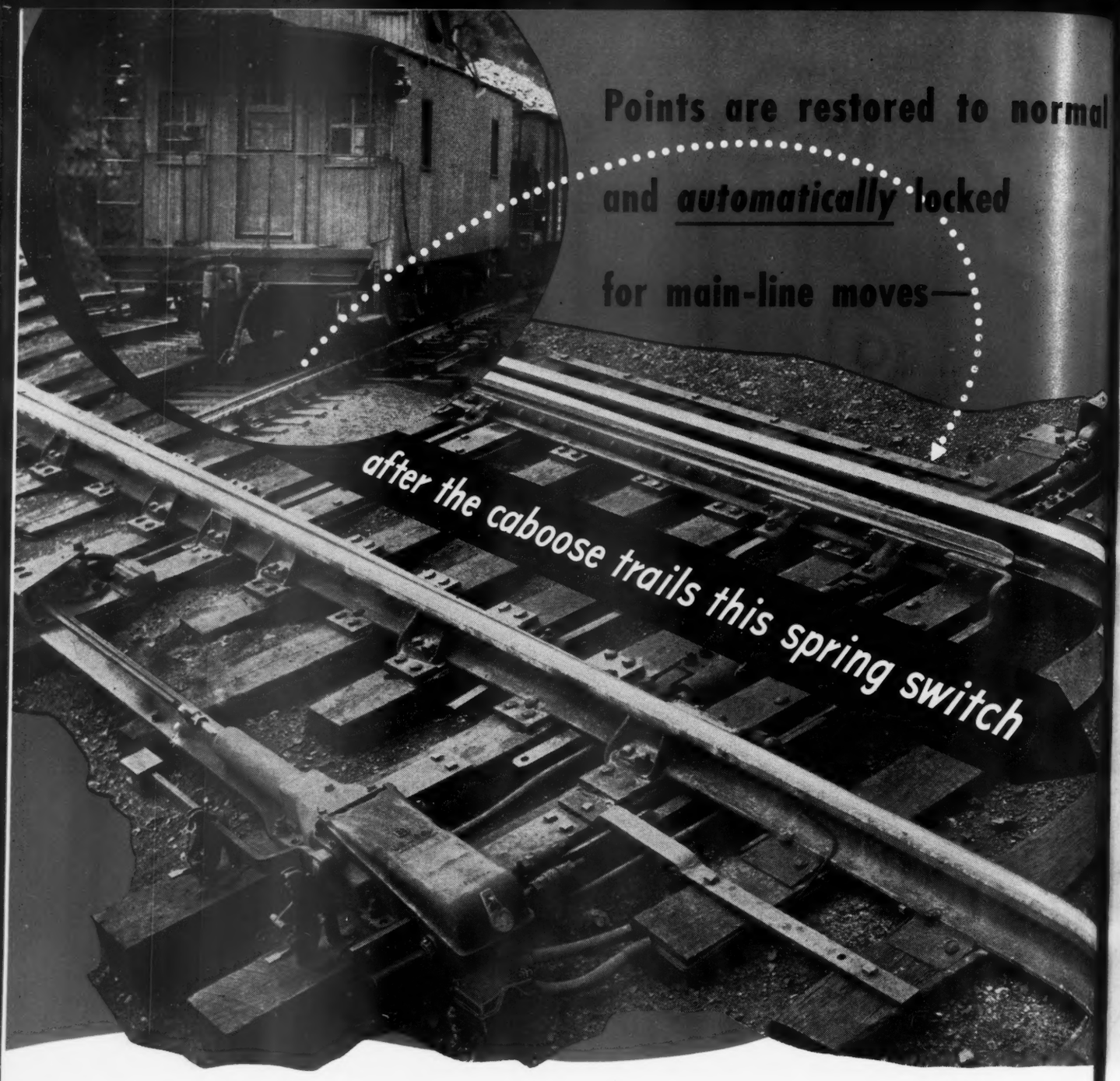
Subscriptions including 52 regular weekly issues, and special daily editions published from time to time in New York or in places other than New York, payable in advance and postage free. United States, U. S. possessions and Canada: 1 year, $6.00; 2 years, $10.00; other countries not including daily editions in Western Hemisphere 1 year $10.00; 2 years $16.00; other countries 1 year $15.00; 2 years $25.00. Single copies, 50 cents each, except special issues.

H. E. McCandless, Circulation Manager, 30 Church Street, New York 7.

Railway Age is a member of Associated Business Papers (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service.

PRINTED IN U. S. A.


Points are restored to normal
and automatically locked
for main-line moves—
after the caboose trails this spring switch

To ELIMINATE slow orders at spring switch locations and expedite traffic with safety, many railroads are installing "Union" Mechanical Facing Point Locks to provide the equivalent of interlocking protection for main-line train movements.

Trailing moves against the closed point are made at speeds consistent with the turnouts employed. When a train trails a switch, the flexing of the switch points causes the automatic unlock of the lock rod to permit the trailing movement.

After the train has cleared the spring switch, the points are returned to their normal position and a powerful spring restores the locking plunger of the mechanical facing point lock in the notch of a standard lock rod. A built-in circuit controller checks the locking plunger and the points of the switch to insure that they are in their proper positions for the safety of subsequent train movements.

UNION SWITCH & SIGNAL COMPANY

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

WEEK AT A GLANCE

HUNDRED-YEAR MARK: This week a hundred years ago the Galena & Chicago Union began operations. That pioneer railroad into Chicago, in which the 9,626-mile Chicago & North Western system had its beginnings, was a determining factor in the development of Chicago as the greatest railroad center, and the lines that have been integrated into the present system have contributed immeasurably to the growth and prosperity of the nine states they serve. This issue tells what the North Western has done to commemorate the centennial and summarizes the story of its genesis and expansion.

MODERNIZATION AND ADAPTATION: The North Western has 3.5 per cent of the Class I railroad mileage, but its revenues are only 1.9 per cent of the total. Nevertheless, it was a money-maker during most of its first century, and it begins its second, as the article on page 76 points out, with a sound financial structure, a growing fleet of modern equipment, and a fixed plant that has been undergoing consistent improvement. Competition from trucks and a large mileage of light-traffic branches have tested its management's ingenuity and versatility, but its 1947 reports show substantially higher efficiency in comparison with earlier high-traffic years.

EXAMPLE AND CONFIDENCE: The centennial of the North Western is of specially wide significance, our leading editorial observes, because the immediate success of its initial five-mile segment gave men confidence to follow its example, building railroads far across the wide prairies that were to be the granary of the nation. Railroads *made* the West. Those railroads now need the understanding support of the people of the West (as of other sections) if they are to continue to thrive as tax-paying, unsubsidized, profit-making entities. The North Western and other roads are dramatizing such events as this centennial to enlarge that essential understanding.

A BASIC INGREDIENT: There is a "community of interest" between safety and good management, the Monon's President Barriger told the Railroad Section of the National Safety Council last week. Our report of this meeting, appearing in this issue (page 86), develops the speaker's theme and the corollary admonition that concern about the principles of safety is a function of management that cannot be delegated.

PRESCRIBING COLD-WEATHER COMFORT: Equipment has been developed to assure a supply of steam adequate to take care of any train-heating needs, whatever motive power is used, says L. H. Gillick of Vapor Heating Corporation in the article on page 81 this week. Boiler capacity must be sufficient, but that is not the only limiting factor, he points out. Speed, length of train, size of train line, amount of insulation, these and other elements enter into the analysis of individual conditions that he recommends as a basis for a prescription to produce dependably satisfactory temperatures in passenger cars.

REFORM OF REGULATION: If A.A.R. President Faricy could have been present at the Associated Traffic Clubs' meeting last week in Cincinnati, he would have asked his listeners to think about a lot of questions — questions bearing on the urgent need for early and thorough revision of the basic legislation affecting transportation. Not only traffic men will want to weigh carefully these challenges to the complacency with which official Washington seems, in general, to regard the present implementation of the national transportation policy. It is true that the railroads' interests are at stake. So are the interests of everyone else whose welfare and security depend on adequate transportation capacity in time of war or of preparation against war. Mr. Faricy's questions are outlined in the convention report on page 83.

NEW NORTH PLATTE YARD: An outlay of $3.5 million has produced for the Union Pacific a new classification yard on its main line at North Platte, Neb. The illustrated article describing it emphasizes the importance of such devices as teletypes, talk-back loud-speakers, two-way radio and inclosed inspection pits in the smooth and efficient performance of this modern retarder-equipped yard.

DEMAND FOR CARS: Car Service Chairman Gass finds in the car-shortage statistics some room for encouragement, our news columns indicate. There still aren't enough cars to match shippers' requirements, and open-tops are particularly short, but the situation overall is better than a year ago — 50 per cent better, in fact. Contributing to this improvement is an increase in the same period of over 20,000 cars in the total ownership. The grain harvest, taking all crops into account, is expected to be 8 per cent greater even than record-setting 1946.

MORE POWER IN LIGHT DIESELS: An increase of 38 per cent in engine horsepower in its 65-ton Diesel-electric switcher, and of 10 per cent in its 80-ton standard model, has been achieved by General Electric by improvements in design which are outlined herein (page 82).

STEAM OR DIESEL?: A letter from a correspondent which appears in this issue (page 73), and our editorial comment thereon, emphasize the need for further objective and authoritative exploration of the relative advantages and deficiencies of coal and oil as the railroads' fuel of the future.

You get a WARRANTY with every new General Motors Locomotive — a GUARANTY with every Genuine GM Replacement Part

Beyond the Warranty you receive with each new General Motors Diesel locomotive, Electro-Motive gives you the added protection of a Guaranty on every genuine General Motors replacement part.

This unique policy of a locomotive builder guaranteeing spare parts (outlined in our General Service Bulletin No. 528 dated April 10, 1948) completes the owner's protection against defective material and/or workmanship following termination of the Warranty on new locomotives.

This policy is clearly defined, practical and fair. It provides a "make good" for any or all parts or assemblies adjusted under *either* Warranty or Guaranty. Replacement assemblies sold on Unit Exchange basis carry the same guaranty as any new replacement part. And our field-inspection service saves you transportation costs to our plant.

Here's another of the many *plus* values that go with your purchase of General Motors locomotives—good reason, too, why it pays to buy only genuine General Motors parts for General Motors locomotives.

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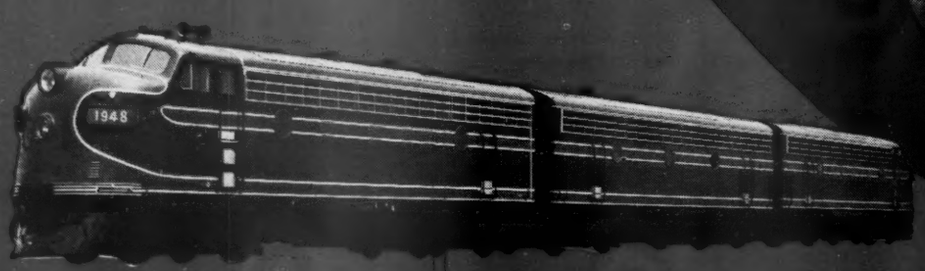
Home of the Diesel Locomotive



GENERAL MOTORS LOCOMOTIVES

RAILWAY AGE

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WESTERN RAILROADING AND THE NORTH WESTERN

As the century moves near to its half-way mark the number of railroad centennials each year increases, so that 100-year observances of even the most outstanding properties are becoming almost commonplace. But the centenary which the Chicago & North Western observes this year is an event of wider significance than that of an individual company, deserving the attention of the entire railroad fraternity.

On October 25, 1848, a third-hand locomotive called the "Pioneer" made its first run on the strap-and-stringer rails of the Galena & Chicago Union for five miles out of Chicago and thereby started off that city as the country's railroad center, and, though it was not the first locomotive in Illinois, set the pattern for that distinct phenomenon called "western railroading." The Railroad Fair at Chicago showed off the color and romance of that force in American life. The history of the North Western as a whole demonstrates the underlying political and cultural bases of "western railroading." But it was the immediate success of the Galena road which gave men the example and confidence they needed to tame the prairie with iron rails.

Railroads Made the Land

It is conceivable that the eastern seaboard could have lived and progressed (though slowly) entirely without railroads. But the great spaces of the western plains were worthless without them. Areas which did not lie close to water facilities were called "refuse land." Henry Clay once said of a railroad-less area not more than 100 miles south of Chicago: "This land is, I believe, about 300 miles long and 100 miles wide. . . . It is certainly worthless right now. . . . Nobody will go there and settle." Stephen Decatur complained: "The young states are made desolate by lands that pay no taxes, held at a price nobody will pay; they are jungle."

Since the West was sparsely settled, the only hope of making a livelihood there was to sell to distant markets. Settlers found that just a few miles of wagon hauling absorbed all or most of the price they received for their produce, and made their incoming supplies prohibitively expensive. The early American railroads were acclaimed, not so much for their speed as for the fact that they greatly cheapened the cost of transport. The western settlers looked upon them as their only salvation and saw in them the coming of a millennium. The fact that the railroads did not cure *all* the ills of living in the West undoubtedly brought about the unreasonable Granger regulations. The railroads were blamed, not because they failed to bring real benefits, but because they did not produce the dream entire.

The fact is that railroads *made* the West. They were not just a form of transportation, but a way

and source of life. They preceded settlement. They parcelled out lands. They brought in machinery and household goods free, or at reduced rates. They wooed immigrants from other countries. They helped them farm more efficiently. They kept settlers alive in storm and drouth, as the North Western's fine color film, "Song of the Pioneer," depicts with great dramatic effect. The North Western also has in its archives a history of the origin of place names along its lines, which shows that most of the towns served by it were named by it.

Capital Hard to Get

Westerners had plenty of land but very little liquid cash for railroad ventures. Most people came to the West because they failed to get wealth in the East. Whatever property the settler had was in the form of land, buildings and livestock. Hence it was necessary for the railroads, most of the time, to go to the East or to Europe for money. And an absentee creditor is never popular. One reason for the great early success and popularity of the Galena & Chicago Union is that, somehow, it was able to get the support of local people. But, for the most part, the raising of capital remained for western roads an overwhelming problem.

The farther west railroads were built the greater were the physical difficulties in their construction. Eastern roads had the advantage of building in well-established communities, with facilities for securing materials and labor, and traffic already at hand to support the line when built. Western roads had no such aids. Since every Westerner hoped to become a landowner or a merchant (else he would not have come), and as long as land was cheap, labor was hard to get and keep. Supervisory and managerial jobs were equally difficult to fill because not enough successful, skilled men could be lured to the West.

Notwithstanding these and many other obstacles, the western roads *were* built. While a few (among them the North Western) were immediately profitable, most of them found the financial going rough at first. Only when they could give their owners regular and reasonable dividends were funds procurable in the quantity and at a rate which made possible the intensive improvements and services for which the present-day western roads are noted.

The eventual prosperity of the western lines resulted automatically, in a sense, from the rapid building up of the country. But, more directly, it stemmed from certain managerial policies, particularly with respect to rates, which, in some respects, were revolutionary. Cy Warman, a celebrator of western railroading, once pointed out that "the history of any western railroad will prove that a railroad will make business where none exists." He recalled that a stage line gave up operation between Pueblo and Santa Fe because it could not get one paying passenger a day, yet the Santa Fe railroad, built over the abandoned stage route, never failed to pay expenses from the day it opened up for business. The early Galena road tripled the movement of farm produce into Chicago in a year; before its opening it had not been worth while to raise the stuff.

Western railroaders had to disregard distance as the controlling factor in rate-making, because they had to help their customers compete with eastern producers in eastern markets. They were, in a real sense, co-partners with the settlers, and the business success of the latter had to take precedence over considerations of operating costs, interest, value of commodity or distance.

The pageantry and showmanship which go into dramatizing for popular enlightenment such significant historical events as this centennial are not to be classified merely as agreeable entertainment—although they are that, of course. These things are the very warp and woof of America's free and self-reliant way of life. Our institutions have no other safeguard for their preservation than popular understanding and support, and educational efforts to this end are one of the major obligations of those in responsible charge of these enterprises. Nothing in the record of railroad managers testifies more eloquently to their competent and imaginative conception of their duties than the thoroughgoing way in which they have gone about making generally known the link which exists between railroad history and the history of America's greatness.

BURIED METAL

Railroads are frequently criticised for neglecting research. Such criticism often arises from the popular misconception that research should produce spectacular results such as atom bombs and moon rockets. Railroads are organizations which must operate within the limits of economic laws and must, without subsidies, produce services which their customers are willing to pay for. For these reasons, railroad research is almost always aimed at getting more for less, and the result is not often spectacular.

A notable example of railroad research is that on corrosion of buried metal which has recently been completed by the Committee on Electrolysis of the Electrical Section, Engineering Division, of the Association of American Railroads. Over a period of years, it has studied the corrosion of metal buried

in the ground, and the deterioration of concrete which surrounds this metal in such places as footings and guy anchors. It has shown how such corrosion is rapid where there is a flow of direct current into the ground and how alternating current has no effect on either steel or concrete.

It has also shown that various admixtures of other material in the concrete have little or no effect, and has finally come up with a practical answer to the problem. By the simple expedient of coating the concrete, or the form into which the concrete is poured, with an asphaltum compound, electrolytic corrosion is practically eliminated and the structure is protected from the effects of moisture, even in soils which contain large amounts of cinders. It was also found almost equally effective to coat only the steel around which the concrete is poured.

Structures with such protection will show no deterioration for years while others without it will fail rapidly under the same conditions. There is nothing very spectacular about such a discovery, but it will result in the saving of much steel and in reducing expensive replacements. The public will remain unaware of the steel in the ground, but it will be benefitted by the railroads' new means of arresting corrosion.

FUTURE MOTIVE POWER

In a communication published in this issue a writer calls our attention to an article which appeared in another publication, the author of which questions whether Diesel horsepower on the railroads may not become "Trojan horsepower." Our correspondent is of the opinion that, since "many stories favorable to Diesels" have appeared in the columns of this paper, the arguments against the Diesel should also be presented to our readers. He implies, at least, that there is some question in his mind as to our willingness to present both sides.

The record scarcely justifies doubt on this point. Indeed, some of those who are strong advocates of the Diesel and ultimate complete Dieselization of the railroads of the United States have voiced the same doubt of our willingness to present the arguments of those who favor that course.

Such opinions probably arise from the tendency of deeply committed advocates in any controversial situation to doubt the motives of those who maintain a position of impartiality and to conclude with undue haste that "he who is not with me is against me." The columns of this publication are open to statements of fact, and to interpretation of the facts, by competent advocates of either side of this or any other moot question within its field.

That this paper has assumed no fixed position on the question of the future motive power of American railroads is to say that it believes that not all the pertinent facts are yet a matter of record—that, indeed, many of them are still in the making. It might be added, also, that, while facts are indispensable ammunition for victory in such a contest, the relative zeal of the combatants in revealing and dramatizing the facts which speak in their behalf may also have a lot to do with the final outcome.

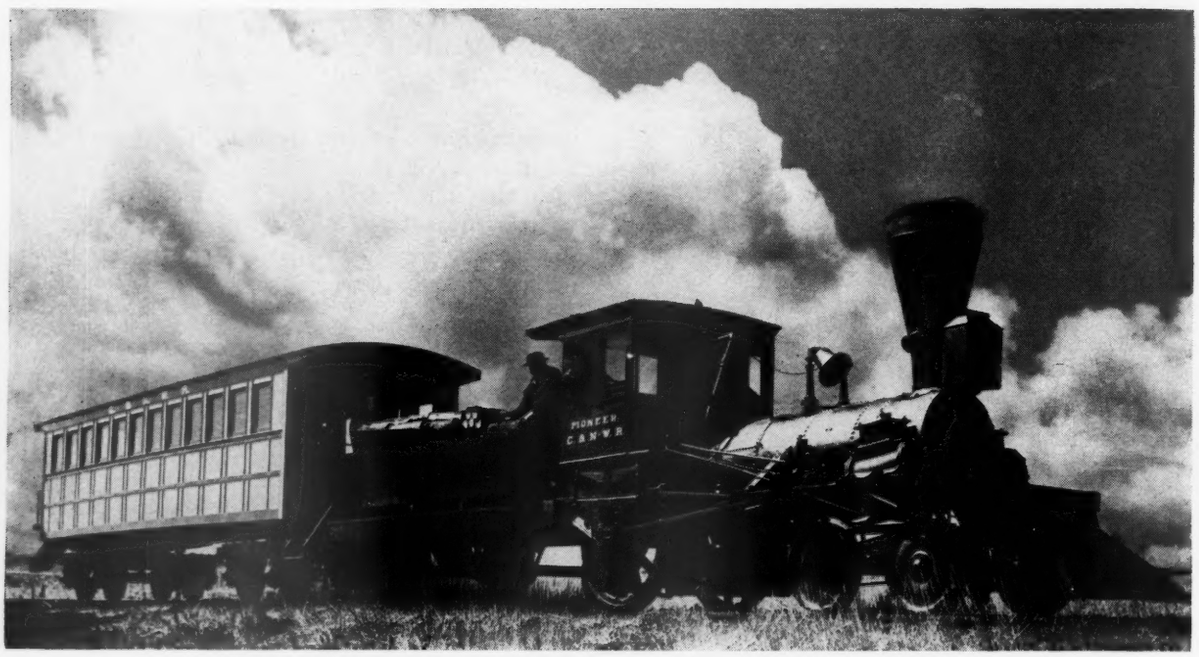
LICKING THE SNOW BEFORE IT FALLS

It seems a shame to disturb the serenity of Indian summer with a reminder that snow is on its way—but facts have to be faced and coming storms are one of them. And the roads which do the most thinking and forearming in this sector now will be the ones with the fewest operating difficulties and the lowest snow-removal costs when the storms get here.

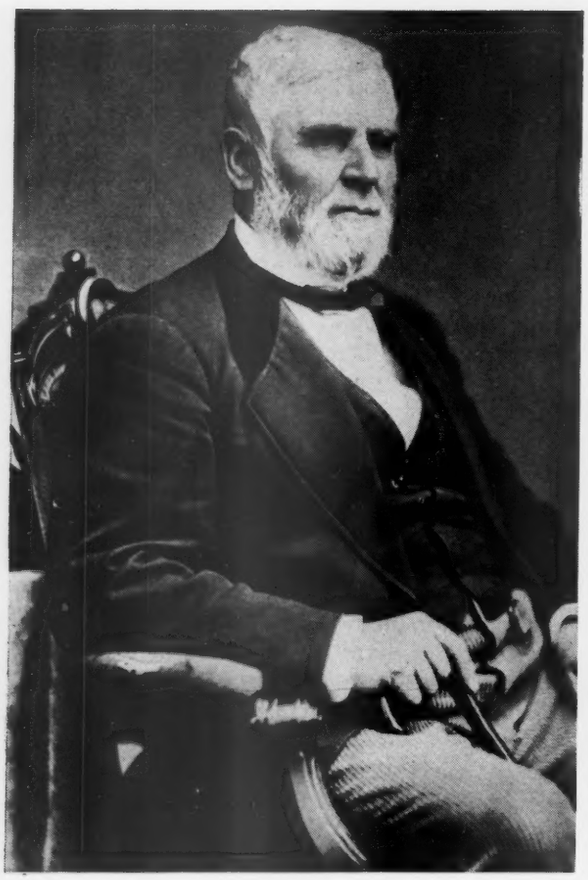
It was reassuring to those who attended the recent Roadmasters' convention in Chicago to hear a Canadian—J. W. Risk, a snow-fighter of many years experience—tell, almost as if it were a bedtime story, how they fight snow successfully in the Dominion, where annual falls over wide areas range from 75 to 200 in. The basis of their success, he reported, is "extensive preparation, proper mechanized equipment, a trained personnel, and close coordination between all departments involved."

With labor scarce, and growing scarcer under the increasing impact of new national defense measures, success in coping with storms on the railroads during the coming months will depend more than ever before upon the effective use of a wide range of snow-removal equipment—from switch-heaters to plows, and including a number of machines normally used in other operations. High labor costs, too, give urgency to the use of machines, many of which do the work of an army of men—faster, better, and with minimum hazard to safety.

Requisitions for machines to do such "unproductive" work often get a cold reception from managements, but study of what some roads—possibly their own—are spending annually for snow and ice removal—ranging frequently from as much as 2 to 9 per cent of total maintenance-of-way expenditures—should cause them to warm up to machines which demonstrate that they can cut expenditures at least in half, while eliminating costly delays in service and diversion of traffic to competitors.



HIGH SPOTS IN THE NORTH WESTERN'S HISTORY



NORTHWESTERN
RAILWAY.
IT IS THE BEST LINE FROM CHICAGO TO
COUNCIL BLUFFS
OMAHA
SAN FRANCISCO
The Best Line!
The Best Line!
MAP OF THE GREAT TRANS-CONTINENTAL ROUTE
AND ALL POINTS WEST
You should Patronize this Line because
It is the Shortest, Quickest and Best.
Its Hotel Cars are the best ever built.
Its road bed and bridges are perfect.
Its rates of fare are as low as the lowest.
In all improvements it leads its competitors.
It runs in an almost air line to the Missouri River.
You should Patronize this Line because
It alone runs Hotel Cars west of Chicago.
It has the Best of Steel Tracks.
Its Passenger Coaches are modern and unsurpassed.
By it you can be ticketed to all Western Points.
It is by all odds the best Western Road.
Its trains are always on time, and do not miss connections.
THIS IS THE POPULAR WESTERN TRUNK LINE
THROUGH TICKETS
Pullman Palace Hotel and Sleeping Cars on this Line alone!

One hundred years ago, on October 25, 1848, the first locomotive to serve the future railroad capital of the country departed from a small station building on the Chicago river and ran due west for five miles over a track of wooden stringers and strap rails built by the Galena & Chicago Union. The corporate life of this railroad went back to the granting of its charter on January 16, 1836—only six years after common carrier railroading began in the United States and but three years after the Indians ceded to the country the last of their lands east of the Mississippi—but lack of funds and population delayed its building until early in 1847, when William Butler Ogden and a group of Chicago business men bought out the old owners and proceeded to promote and build the Galena line as a local, private enterprise.

The goal of the road, as expressed in its charter, remained: "From Chicago on, towards, if not to, the Mississippi river, near the lead mines at Galena, Ill., and Dubuque, Iowa." But at the same time, its management fully expected to link its rails physically with the Michigan Central, then building toward Chicago from the east, and were prepared to build their own line around the head of Lake Michigan to do so. By such means, Mr. Ogden said, prophetically, it would secure "to the country through which it passes the great North-Western railroad thoroughfare for all time to come."

Had to Be Built Cheaply

It had been the intention of the management to lay the road with good new iron girder, or "edge," rail and to buy a new locomotive, but the withdrawal of certain credits and a "tight" money market in Great Britain made it necessary, "as the only alternative," to install the old-fashioned timber stringers and second-hand strap rails. In the flat country, the cost of grading and bridging was modest and the road cost less than $8,000 a mile, as compared with the then $40,000 average on the eastern seaboard.

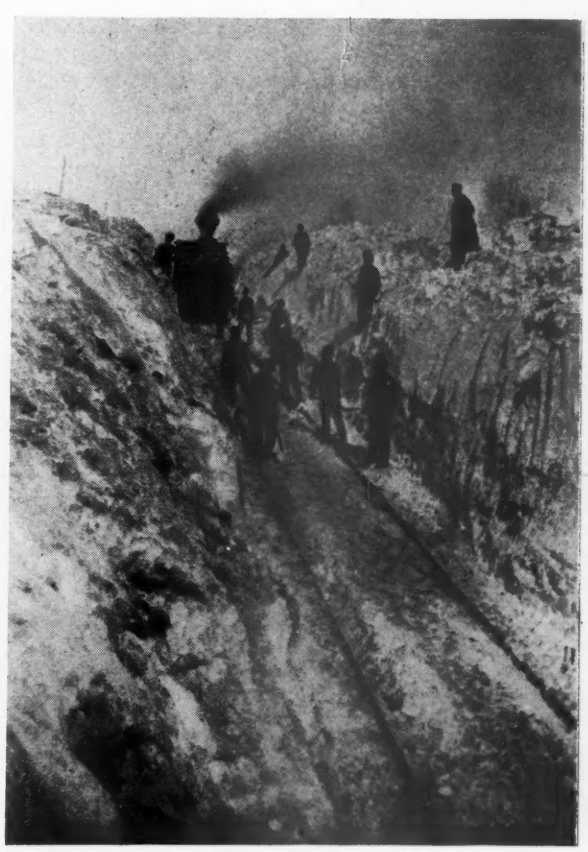
Motive power for the road was provided by a third-hand locomotive appropriately named the "Pioneer." Possessing but one pair of drivers, this engine was completed by Baldwin in July, 1836, as its 37th locomotive and, after pulling trains for some time on the Utica & Schenectady (now part of the New York Central), was sold to the Michigan Central, which, in turn, sold it to the Galena for $3,742.98. The "Pioneer" burned wood, had 10-in. by 18-in. cylinders, and weighed 10 tons. In 1850 the locomotive was leased to the Aurora Branch railroad (now Burlington) and later returned to service with its owner.

The opening of the Galena line *west* from Chicago was a remarkable example of pioneering. At that time, the Pennsylvania was yet not completed between Philadelphia and Pittsburgh and the Hudson River road north from New York (now New York Central) was still in the grading stage. No railroad as yet served St. Louis, and the Michigan Central had still to reach Lake Michigan from Detroit. So remote was Chicago that the usually alert American Railroad Journal made no mention of the opening of the G. & C. U.

Good Business from the Start

By December, 1848, the Galena road extended 10 mi. west to the Des Plaines river. This stretch had always been the terror of travelers. On the low, wet prairie, without drainage, the common road was almost impassable in spring and fall, when one might trace the route by broken wagons and dead animals. Hence, it was with joy that farmers avoided this "slough of despond" by giving their produce to the new railroad. The first revenue freight of record was a load of hides and pelts on December 15, and, before the end of 1848, wheat and other produce piled up at the western terminus faster than the road could haul it into Chicago. Revenues reached $15 a day!

Equipment and property were added as fast as money



Facing page (left)—William B. Ogden was the first president of the G. & C. U. as an active corporation. He was also Chicago's first mayor and later became the first president of the Union Pacific

Facing page (right)—This 1878 poster advertises the North Western as part of the famed "Overland" transcontinental route

Right—The railroad spent great sums to keep supply lines open to newly settled country in Minnesota during the record snowfall of 1880-1881. This picture was taken after a blizzard on March 22, 1881

and men could work and by January, 1850, the road stretched 42 mi. to the Fox river at Elgin, Ill., and was building a 50-ft. by 150-ft. freighthouse and wharf in Chicago. From June 1, 1849, to May 1, 1850, more than 37,000 passengers were carried. The following year the strap rail was replaced by iron "T" rail. By 1853 the road reached Freeport, Ill. 120 mi. There it terminated because the Illinois Central had already built west to Galena.

On to the Mississippi

But the G. & C.U. did not abandon its goal of reaching the Mississippi, and in 1854 it started a more direct line from West Chicago (Turner's Junction) which, by 1855, reached Fulton, on the Mississippi, opposite Clinton, Iowa. This is now part of the main double-track line between Chicago and Omaha, Neb., forming the first segment of the famous "Overland" transcontinental route. The original Galena line from West Chicago to Freeport is now a branch, with once-a-day passenger service.

The road between Chicago and West Chicago carried also the trains of the Aurora Branch Railroad, original segment of the Chicago, Burlington & Quincy, under a trackage rights arrangement which lasted until the Burlington completed its own line in 1864.

In 1856 the Galena began to operate by telegraph. In the same year, it purchased two locomotives which, by contract, had to burn Illinois coal successfully, for the prairie's limited stock of wood was becoming too expensive for fuel. In this year, also, the road talked of building its own line west from Clinton to forestall competition. Particular reference was made to the construction of the Chicago, Iowa & Nebraska, which was completed from Clinton to Cedar Rapids in 1859. In 1860 connection with this road was made by combination bridge and steam car-ferry over the Mississippi, and, in 1862, the Galena leased the Iowa road and the Cedar Rapids & Missouri, extending from Cedar Rapids to Marshalltown.

ROSTER OF NORTH WESTERN PRESIDENTS

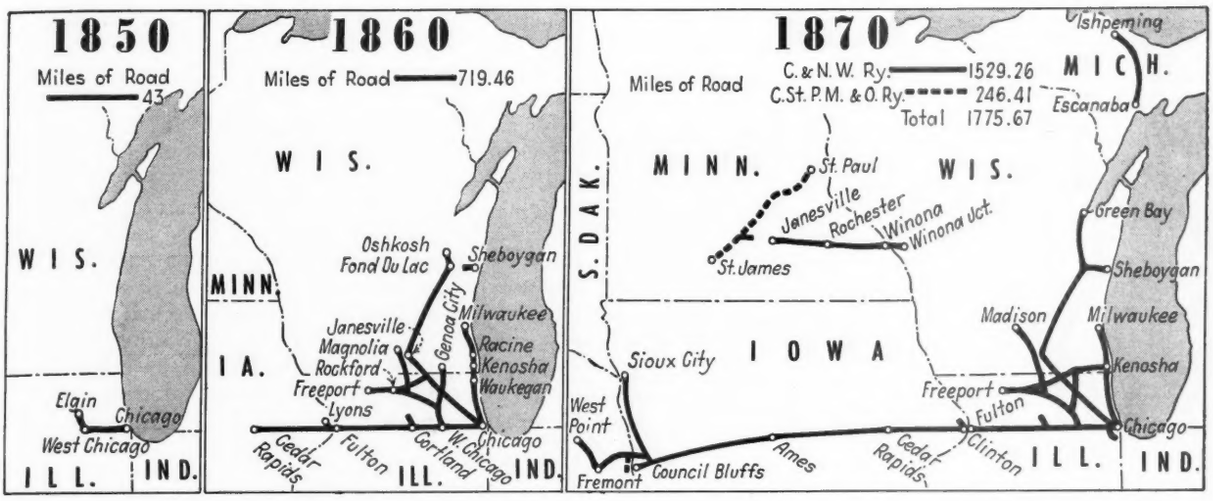
Name	Date Elected
William B. Ogden	June 7, 1859
Henry Keep	June 4, 1868
Alexander Mitchell	Sep. 1, 1869
John F. Tracy	June 3, 1870
Albert Keep	June 19, 1873
Marvin Hughitt	June 2, 1887
William A. Gardner	Oct. 20, 1910
Richard H. Aishton	May 23, 1916
William H. Finley	June 11, 1918
Fred W. Sargent	June 23, 1925
R. L. Williams	July 25, 1939*
	June 1, 1944†

*Chief Executive Officer for the Trustee
†President

Origin of the North Western

The name of the Chicago & North Western goes back, not to its G. & C.U. segment, but to a consolidation of small roads in Wisconsin. In 1848 there was chartered in that state the Madison & Beloit, which, its name changed to Rock River Valley Union, built from Minnesota Junction to Fond du Lac in 1854. In 1855, this road consolidated with the Illinois & Wisconsin, which, the previous year, had built from Chicago north to Cary, Ill. From this combination came the Chicago, St. Paul & Fond du Lac, which was extended from Cary to Janesville, Wis., to connect its Wisconsin and Illinois properties. In 1859, before this was completed, the road was bought at auction

Built in 1881, the last Wells Street depot of the North Western in Chicago was then the "last word" in railroad stations. It was replaced by the existing Madison Street station in 1911. The Merchandist Mart now stands on its site



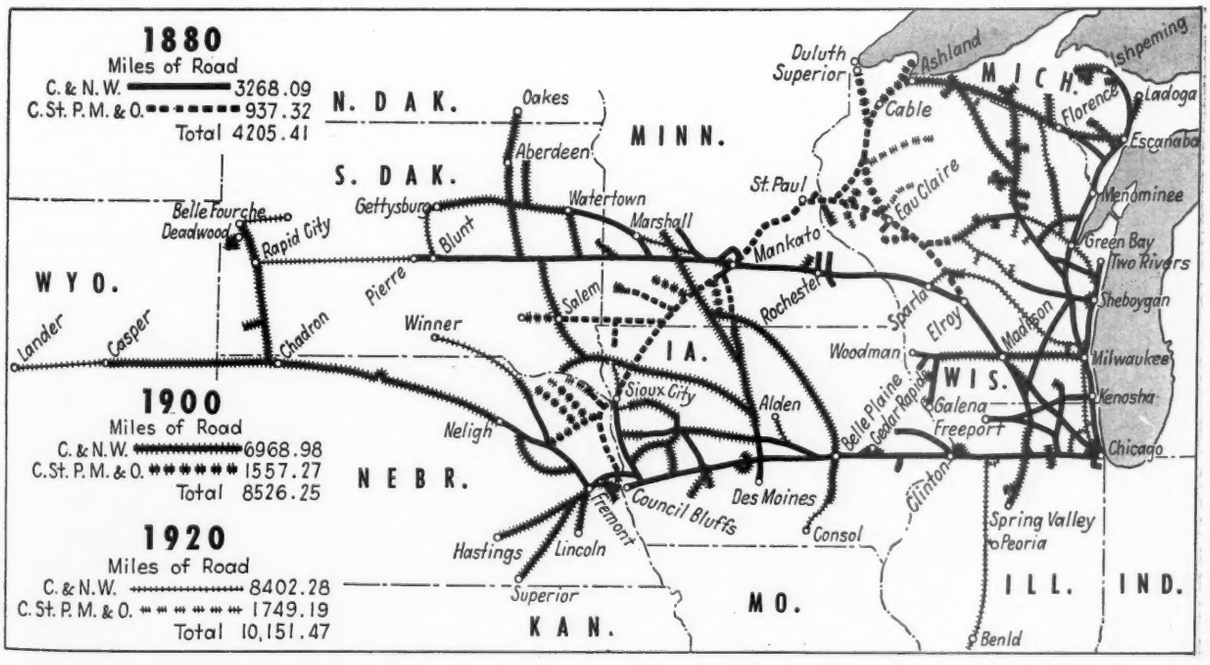
Lines which are now a part of the C. & N. W. System, as they existed in successive decades. It should be noted that they were not necessarily under common management as of the date shown

by a group of capitalists (among whom was President Ogden of the Galena) who organized, on June 7, 1859, the Chicago & North Western Railway Company.

The Galena, which had thrust up a branch to Beloit from its main stem at Belvidere, and had other plans for expansion northward, grew alarmed at this threatened competition. In 1864 the two roads agreed to consolidate and, although the Galena was the larger of the two, took the name C. & N. W., as more fitting the extent and future of the property. The consolidation involved 860 mi. of owned and leased lines and was the largest ever to have taken place in the United States.

Following the consolidation, the new company spread out rapidly in the directions indicated by its title and, at the same time, intensified its coverage of older territory by a remarkable network of new and leased branches and secondary routes. In 1867 the road reached Council Bluffs, Iowa, on the Missouri river, and immediately became a valuable aid to the Union Pacific, which had then reached Cheyenne, Wyo., and was ready to scale the Rockies. Hitherto the U. P. had depended on river boats and wagons for its supply line from the East. With the material which the North Western poured into its yards, the first transcontinental line was completed two years later. Thereafter, the C. & N. W. formed an integral link in the "Overland" route.

The old Galena had, in 1862, been invited by Con-



The system as it appeared in 1880 (period of most active expansion), 1900 (end of the era of extension of territory) and 1920

gress to accept what the legislators deemed a most favorable charter to build a transcontinental line west from Omaha, but had refused it because it saw no possible profit in a railroad "across the desert." The C. & N. W. eventually built a line across most of Wyoming and from time to time it was rumored that the road would build a transcontinental line to the Pacific, but its management adhered to the belief that the property would do better to link up with existing routes.

By 1870, the road had achieved both of its major aims—to reach the Missouri, and to tap the iron and copper country to the north. It was the first railroad from the south to reach the rich mineral belt of Upper Michigan. But it was clear that it must expand its tributary territory or be crowded out; Nebraska, South Dakota and Minnesota could not be ignored. By 1900, the road had 1,300 mi. of line west of the Missouri.

Conservative Growth

Even in those days, the North Western was not entirely a granger road. In 1880 it was described as using 2,000 special cars and 50 engines uninterruptedly in the movement of ore and iron products to Escanaba, Mich., and hauling vast quantities of lumber from the peninsula of Michigan and northern Wisconsin in the winter and spring.

Continuous extensions of the road in the latter quarter of the 19th Century were conservatively financed, being constructed for cash and under competitive bids from outside contracts. Whatever profit accrued came to the railroad and not to a construction syndicate or pool. By 1880 the C. & N. W. was said to be the largest single railroad in the country, measured by miles of road compared with a national average of 62 per cent, its operating ratio ran about 42 per cent, a substantial portion of the showing being due to substitution of steel rail for iron, the cost of which was, courageously, charged to operating expenses. The road was an early advocate of saving pennies and, in 1880, was one of the first to do away with brass ornamentation on its 400-odd locomotives, thereby dispensing with half its force of wipers.

Acquisition of the Omaha

In 1882 there came into the North Western fold its largest single acquisition—the 1,147-mi. Chicago, St. Paul, Minneapolis & Omaha, or "Omaha road." Control of this line was exercised by ownership of slightly more than 50 per cent of its capital stock until 1925, when the C. & N.W. increased its ownership to 93.66 per cent. The Omaha gave the North Western entrance to the Twin Cities and connections with lines into Canada, as well as better coverage of agricultural lands in the Northwest. The Omaha remains today a separate corporation, though operated as an integral part of the C. & N.W. system.

The C. St. P. M. & O. goes back to April, 1863, when the Tomah & Lake St. Croix was incorporated in Wisconsin. This company built no road, however, and, in June, 1867, changed its name to West Wisconsin railway, completing, by 1872, 178 mi. of road between Warren, Wis., and Hudson, and between Warren and Elroy. It is at the latter point that the Omaha road connects with the C. & N. W. proper. The W. W. was sold under foreclosure to the Chicago, St. Paul & Minneapolis in 1878.

This company consolidated with the 93-mi. North Wisconsin in 1880, forming the C. St. P. M. & O. The latter continued to expand and today operates 1,617 mi. of route.

By 1885 the C. & N. W. system aggregated 5,820 mi., and bad gross revenues exceeded only by two roads in the country—the Pennsylvania and the Philadelphia & Reading—although much of it served raw pioneer country. Despite this expansion, it had a reputation for prudence and for devoting its high earnings to intensive development of its property as well as extensive additions. In 1886, for example, it organized one of the earliest railroad materials-testing departments in the country. In 1895 the "Overland Limited," a solid Pullman luxury train, was placed in service between Chicago and San Francisco.

By the turn of the century, some 8,308 of the system's present 9,626 mi. of road were completed, and most extensions thereafter were either feeder branches, alternative routes to shorten distance or reduce grades, or belt and relief lines, like the freight road between Chicago and Milwaukee.

Safety-First Campaign

In 1906 the C. & N. W.'s general claim agent, R. C. Richards, wrote a book entitled "Railroad Accidents, Their Cause and Prevention," which, with its author, led the road, in August, 1910, to organize the first railroad department dedicated to safety and the prevention of accidents. Mr. Richards had seen the sign "Safety First" in a steel mill and adopted it as a slogan in the North Western's campaign. It spread rapidly and became the national slogan of safety. In 1912 Mr. Richards helped found the National Safety Council, which now enters into every phase of life in the country.

In June, 1911, the road opened its present great passenger station at Chicago, which cost about $24 million and provided 16 tracks, all elevated above the street level.

In 1925 the system reached the peak of its mileage, which thereafter declined, as light-traffic branch and secondary lines were abandoned due to highway competition or exhaustion of natural resources. The same year a Diesel-electric switching locomotive, second of its kind in the country, was set to work by the North Western in Chicago. Started at this time also was the great Proviso yard, containing 200 mi. of track and with room for more than 21,000 freight cars, costing, initially, $16 million. Said to be the world's largest classification yard in terms of standing capacity, Proviso contains also one of the country's largest merchandise transer sheds, accommodating almost 700 cars.

In January, 1935, in the midst of the depression, the North Western introduced its "400," and later the same year joined the Union Pacific in placing in service the streamliner "City of Portland," one of the country's first long-distance lightweight streamlined trains. Thereafter, it steadily added a fleet of streamliners, including transcontinentals operated jointly with the U. P. and Southern Pacific, and a group of "400's" virtually blanketing its own rail network.

THE NORTH WESTERN'S FIRST HUNDRED YEARS—AN EVALUATION

Conceived as a private enterprise in an era of state aid, the road steadily rewarded its owners while constantly expanding; a "gilt-edge" property until the depression of the Thirties

THE NORTHWESTERN CLAIMS THESE "FIRSTS"—

1848—First railroad in Chicago
1856—First western railroad to operate by telegraph
1858—First to use sleeping cars west of Chicago
1863—First railroad to install cupolas on freight cabooses
1864—First railroad to inaugurate *permanent* railway post office service, with pick-up and delivery en route
1865—First steel rail rolled in America rolled at North Chicago for C. & N. W.
1865—Constructed first railway post office cars for United States government
1869—First to use dining cars between Chicago and San Francisco
1910—Originated "Safety First" movement
1926—First railroad to operate a Diesel-electric switching locomotive west of New York
1927—Constructed Proviso yard, world's largest freight classification yard
1930—Constructed Wood Street Terminal, world's largest potato yard
1935—Operated first long-distance streamliner, "City of Portland," in conjunction with the Union Pacific
1936—Developed and installed first locomotive oscillating headlight
1947—First daily streamliner between Chicago and San Francisco
1948—Rear-end red oscillating warning lights placed on all suburban trains

The history of the Chicago & North Western System is a long and honorable one. The events which filled it have been rich and varied. Unlike the progress of many corporations, that of the C. & N. W. has been relatively smooth. Considering its pioneer status, the road enjoyed an amazing continuity of management, of efficiency and, most important, of profits.

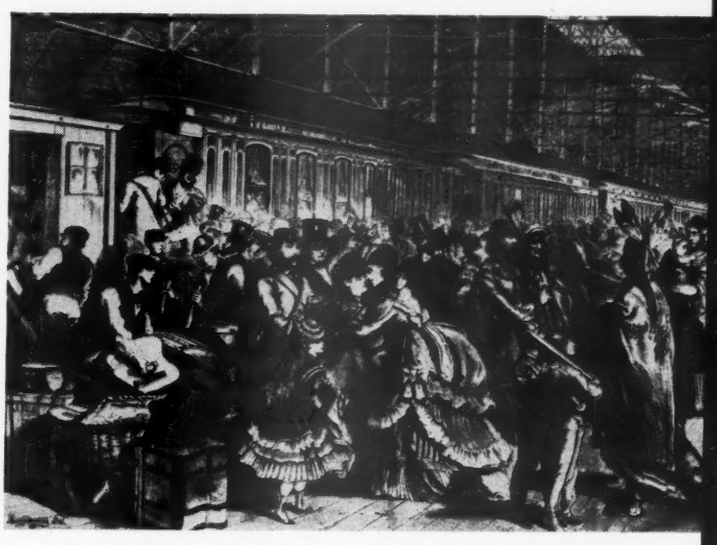
Long a "Gilt Edge" Property

Until highway competition, depression and poor crops drove it to the wall in the 1930's, the North Western was looked upon as one of the most profitable railroad properties in existence. The road produced a steady flow of adequate, reasonable profits, with which it maintained a delicate balance between dividend payments and improvements to the property.

The success which the road enjoyed as an earner was not due to any freak situation—such as lack of competition, valuable satellite raw materials or powerful industrial allies. The fortunes of the road, in the main, have been wrapped up with the prosperity and political climate of the agricultural communities it serves. As a consequence, it suffered all the ills of a "granger" railroad—constant political pressure on its rate structure, ill-advised state regulation, alternate drouths and low prices arising from bumper crops, and inherently inefficient utilization of plant because of violent seasonal fluctuations in traffic offerings.

Nevertheless, by building up ore traffic on Michigan's upper peninsula, by gearing itself to serve as a major link in the country's first transcontinental rail route and, later, by attracting diversified industry and multiple-crop farming, the North Western was able to free itself, to some extent, from undue dependence upon the major money crops. Also, its conservative management saw to it that enough cash was withheld from dividends to tide the road over the rough spots.

During the first few decades of the North Western,



This famed lithograph above brings out all the color and western atmosphere of the C. & N. W.'s Chicago station at Kinzie street in 1875. Below—The "J. B. Turner" locomotive, No. 249, was built by the road in 1867. It bore the portrait of the road's second president—for whom it was named—on the headlamp

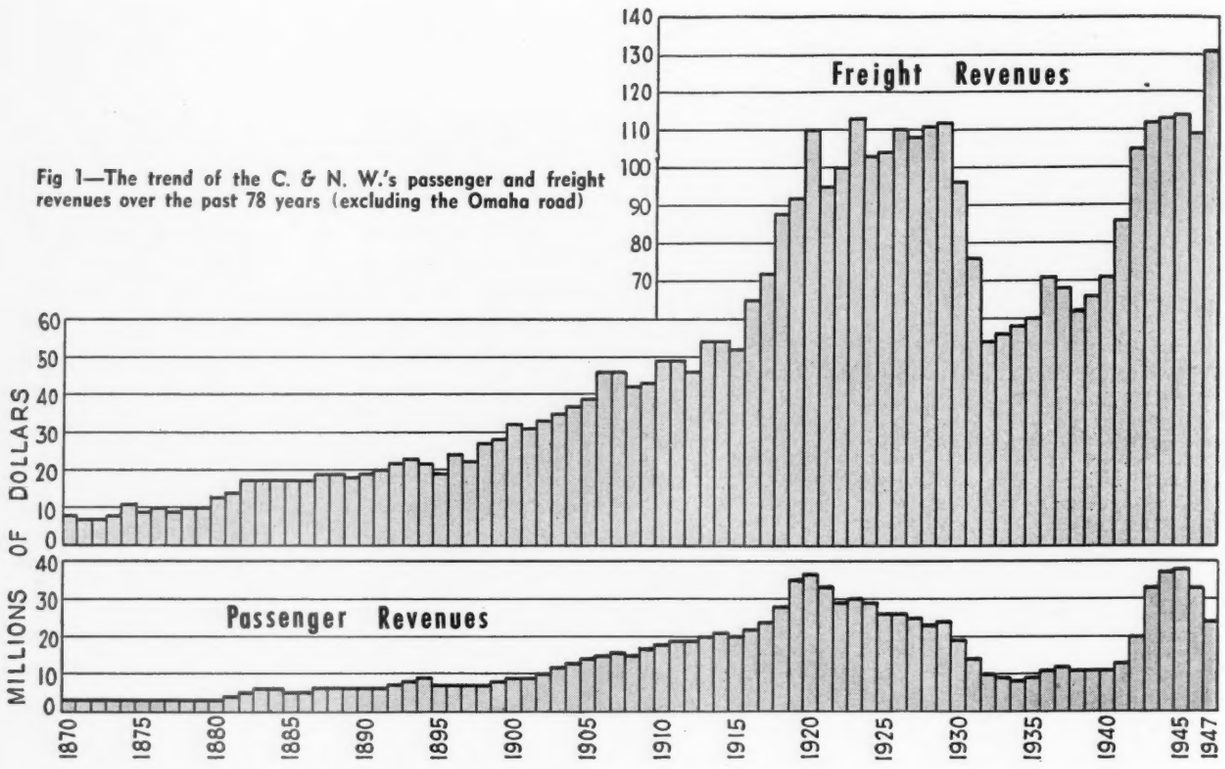


Fig 1—The trend of the C. & N. W.'s passenger and freight revenues over the past 78 years (excluding the Omaha road)

the spirit of the West it served was one of unbounded optimism. Men migrated and settled there chiefly because they chafed under the restrictions of a highly-organized society and because each was confident he could amass a fortune more quickly and easily there than he could back home. Each Westerner and each town expected to become wealthy and famous. The millennium would surely come, they believed, if three supreme desires could be attained: (1) land, (2) capital, and (3) cheap and good transportation.

They got their land from the government, their capital from the East, and their cheap and good transportation from a network of railroads. And yet the millennium did not come. It was not long before the people in agricultural areas began to blame all their sufferings on the railroads. A wave of anti-carrier legislation poured out of state capitals—punitive taxes, ridiculously low statutory limitations on rates and fares, outlandish service demands. This persecution, plus the low level of business, brought many a western railroad to grief. New construction virtually ceased. The return of prosperity and the need for new lines and feeders eventually brought a reconsideration of railroad regulation for a time, though Grangerism returned again in the Nineties, taking the more dangerous form of advocacy of government seizure and control of the roads or building of new lines with which to compete with private companies.

The North Western skipped dividends on its preferred stock in 1874-1876, and on its common in each of the years 1874-1877, but continued in a sound financial condition during this troublesome period. Its dividend payments continued uninterrupted during the 1890's, being based upon unimpaired net earnings.

This financial strength depended on a wide variety of influences. First, the territory served by the road grew steadily and healthily in population, productivity and wealth, due, in no small measure, to the land settlement, imigration, and rate and agricultural policies of the railroad itself. As the graphs of traffic and revenues herewith indicate, this natural growth took up the slack of depressions and crop failures, so that income and traffic figures show an amazingly smooth upward trend to World War I.

Second, the North Western management, by following a shrewd course of action was able to prevent the loss of traffic and power to ambitious competitors. The North Western was not only the first road out of Chicago, but, several decades later, it pioneered the unsettled plains of Nebraska, Wyoming and the Dakotas with its own rails. In a day when seven to ten miles on either side of the line was considered the maximum tributary traffic territory, the road spread a blanket of branches over Illinois, Wisconsin, Iowa, Minnesota, Nebraska and South Dakota.

Third, the company was able to command new capital at low rates, and without costly discount premiums, because it had a reputation for continuous good earnings. Thus, for example, in 1887, it was able to place an issue of $6 million in bonds at the then very low interest rate of four per cent. Because it paid dividends regularly, it could get new money by selling stock, and, as late as 1916, had a ratio of bonds to stock of 2 to 1½.

Unlike most western roads, the North Western was a good earner almost from the first. Two years after it was opened for business the 42-mi. line paid a dividend of 10 per cent. It netted $30 thousand from a gross of only $48 thousand, in its third year of operation. Hence, it never acquired the habit of giving either its future or its control to money lenders.

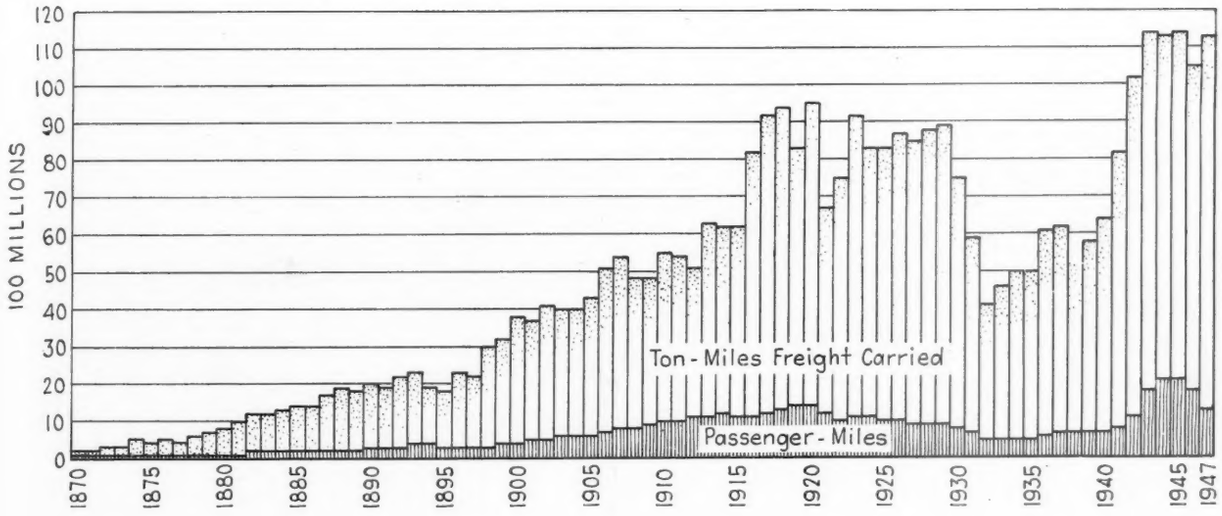
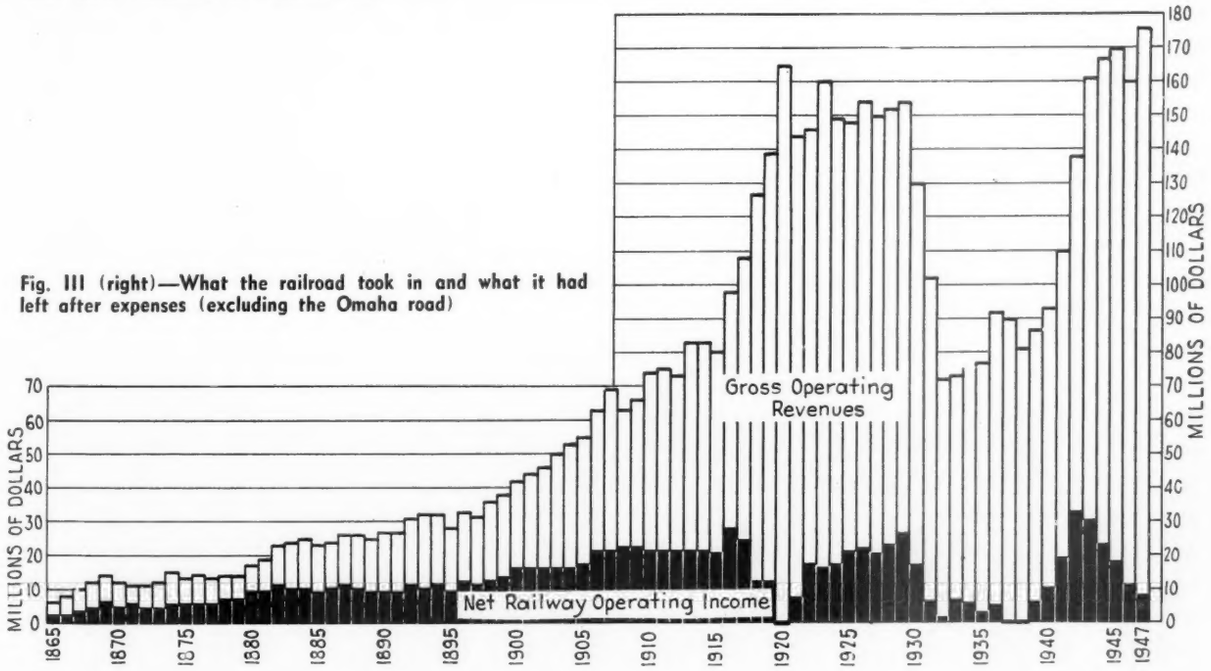


Fig. II (above)—Picture of work done by the North Western since 1870 (excluding the Omaha road)

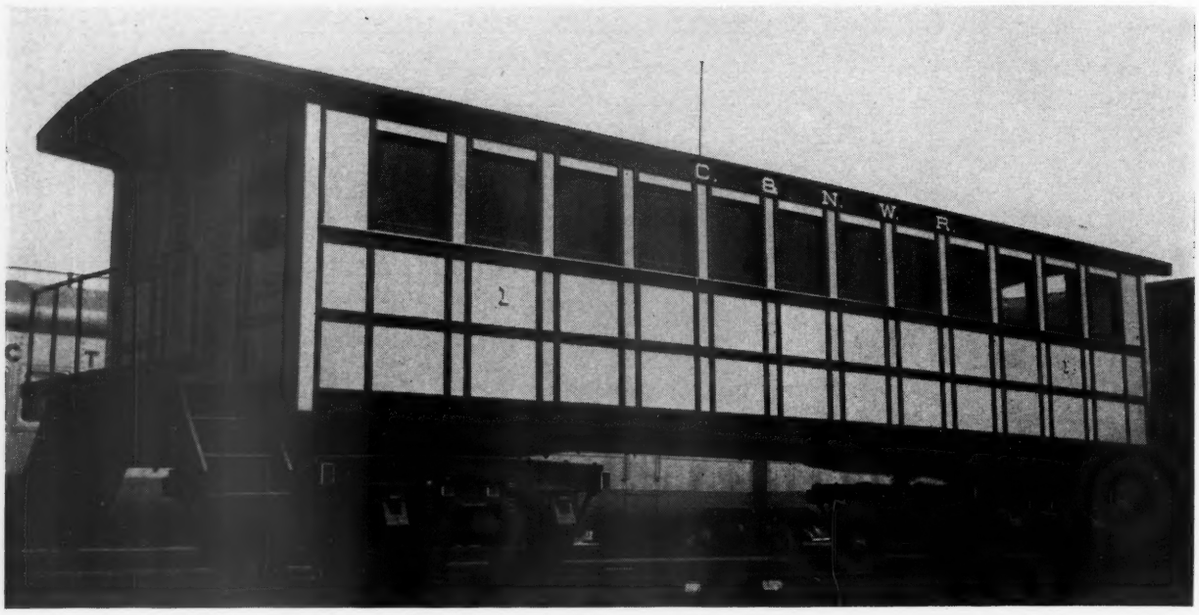
Fig. III (right)—What the railroad took in and what it had left after expenses (excluding the Omaha road)



Fourth, the company was progressive and efficient, to the extent that it held a nationwide reputation for solidity and performance. The list of its claimed "Firsts" accompanying this article testifies to the determination of the North Western's management, over its long history, to stay "up front." Curiously enough, this record of efficiency was not, for the most part, a result of density of traffic. As noted, the road built a large network of light-traffic branch lines. It has always been a large passenger carrier and long suffered the disabilities of such carriers. The year 1914 was the first in which the C. & N. W. earned as much as $10,000 a mile, though at this time most analysts maintained that an average of $10,000 over the years was the minimum which any road doing a high-class competitive business needed, to be moderately profitable.

Existing as a kind of refutation of such generalities, the North Western, earning generally less than $10,000 a mile, was one of the most prosperous roads in the country. It would appear that its high average trainload, its service, its low capitalization, plus its unusual extent of double track and its fine relations with the Vanderbilts and the Union Pacific were part of the reason.

Although conceived in a feverish and unwholesome atmosphere of state promotion and ownership of pub-



The first passenger car on the Galena road above was built in Chicago in 1849 and cost $2,000. This replica appeared at the recent Railroad Fair at Chicago. The original "Pioneer" locomotive, below, 112 years old, greets a modern North Western Diesel

lic works, the Chicago & North Western's original predecessor roads were strictly the fruit of independent private enterprise, depending chiefly upon local subscriptions for support. The origin of the Galena & Chicago Union, for example, contrasts sharply with that of other early Illinois roads—fathered by the profligate legislature of 1837, which appropriated $20 million for a grandiose scheme of state-owned railroads, canals, turnpikes and other public works. Of this original socialistic project nothing came except a paralyzing debt, a keen dislike for business by government, and a short railroad from Jacksonville to the Illinois river at Meredosia, called the Northern Cross.

The Galena road was built and operated without a cent of government aid, either in the form of land grants, money gifts, stock subscription or debt underwriting. It had to buy its own right-of-way, except where the land owners deeded it as a gift. Although

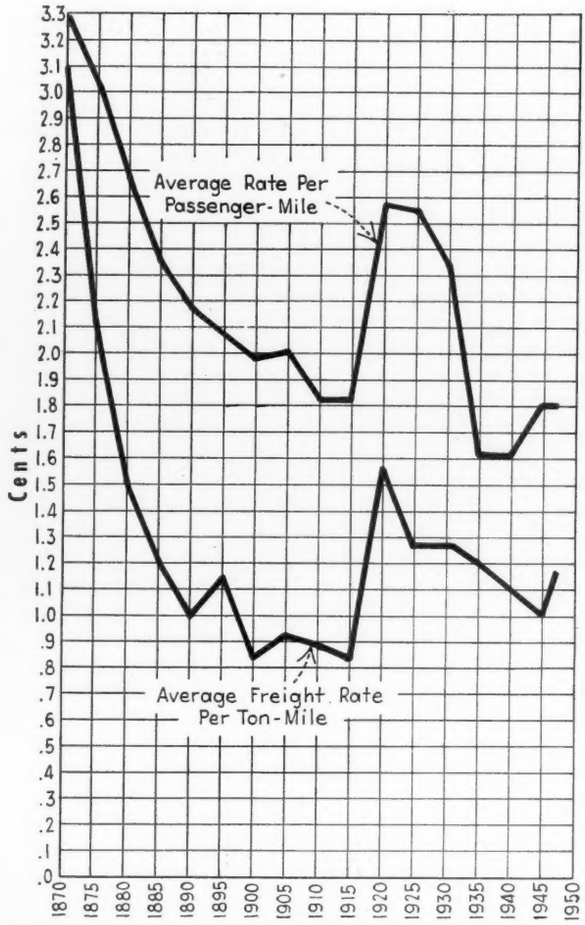


Fig. IV.—The North Western's charges over the years, despite an increase in the general price level, show a downward trend

its chief achievement was to start off Chicago as the country's greatest railroad center, neither it nor any other of the city's railroads have ever been aided by the city in its corporate capacity.

The early financing of the G. & C. U. was a most significant test of the ability of local private resources, resting on a wide base of popular representation, to pay for large works and survive a "waiting period" until income flowed in—and to do it in a new country, sparsely settled and with little free cash. Money matters rarely make for drama, but the gathering of funds for the building of the pioneer road out of Chicago was a kind of epic and lent itself admirably to dramatic treatment in the C. & N. W.'s new color-sound motion picture, "Song of the Pioneer," wherein are depicted the journeyings of William Butler Ogden, the Galena's first operating president, through the countryside along the proposed route to ask, and get, stock subscriptions from hard-bitten farmers.

A Chicago Road

The Galena & Chicago Union was so called because, at the time of its incorporation in 1836, the lead-producing river port of Galena was considered more important as a traffic point than Chicago. By 1847, when active construction began, Chicago had become the more important point, and control of the company had gone to a group of business men. It was ever after a Chicago railroad, a characterization which applies to the entire North Western System. To its successful operation and expansion Chicago owes much of its growth in the critical 1850's, when the future of cities was determined by what then seemed small things. Despite the fact that many Chicagoans opposed the building of the road and no collective aid was given it, the Galena determined, in the opinion of many historians, the future pre-eminence of the city.

Communication...

"Trojan Horsepower"?

New York, N. Y.

To the Editor:

With a possible World War III staring us in the face the assertions on the future of the fuel oil supply for Diesel locomotives made in the article entitled "Trojan Horsepower" which appeared in the October, 1948, issue of Railroad Magazine should be discussed in your publication. As you have published many stories favorable to Diesels, particularly the one on "Fuel Oil For Diesel Locomotives" by the General Motors Corporation in your September 25 issue, it seems to me that the arguments against Diesels brought up in "Trojan Horsepower" should be presented to your readers. For that reason I am summarizing here some of the important points brought out in that article and certainly hope that you are not too Diesel-minded to ignore a situation that is of concern to the entire nation.

The author infers that Diesel horsepower may become Trojan horsepower. His reasons are:

1—We are importing oil to supplement inadequate domestic oil production.

2—We are about to make our transportation system entirely dependent upon oil in the face of unforeseeable international developments.

3—In the next war our armed forces would require twice the amount of petroleum products used in World War II.

4—Competition for high grade fuel oil between jet-propelled aircraft and Diesel engines will be more serious as the jet planes become more numerous.

5—Oil refineries are vulnerable to air attack.

6—In the face of these possibilities fuel oil may be unavailable for Diesel locomotives.

Therefore, in a national emergency Diesel horsepower may prove to be Trojan horsepower, "incapable of self movement and packed with a very real danger for all of us."

Fundamentally, the whole problem boils down to the fact that we have plenty of coal and our fuel oil supply is unpredictable, particularly with an uncertain foreign supply of petroleum and another war being by no means a case of pure fancy.

If Dieselizing jeopardizes our national security we ought to know about it now. I believe this side of the picture, as presented by "Trojan Horsepower," should be given space in your publication. As a matter of fact I'm surprised that the original article was not carried in one of your issues.

A Boilermaker

[This communication is the subject of editorial comment in this issue—Editor]

HOW THE NORTH WESTERN CELEBRATED ITS CENTENNIAL

Exhibit train carrying museum car and rubber-tired replicas toured the system; other railroads contribute to Chicago "Time-Capsule"

A two-ton concrete "capsule" containing more than 500 photographs depicting railroad property and operations in the Chicago of today was buried on the site of the first railroad station in that city at a ceremony held at 11 a.m. on October 25, which marked—to the day—the 100th anniversary of the first trip made by the "Pioneer" locomotive on Chicago's first railroad. Flanked by the original locomotive under steam, a modern Diesel, and couples wearing costumes of 1848 and a designer's conception of what people will be wearing 100 years hence, R. L. Williams, president of the Chicago & North Western, gave the signal to workmen to lower the time capsule into the earth and handed the key to officers of the Continental Illinois Bank, to be held in trust until October 25, 2048.

Calling the "first hundred years in railroading the hardest," he expressed certainty that atomic energy would be playing a vital role in transportation by the time the capsule was opened; that "passenger trains will undergo dramatic changes" and today's freight operation will be as obsolete as oxcarts."

Sealed in a lead-covered container inclosed in a copper box, which, in turn, is encased in the center of the three-foot concrete cube, are photographs provided by some 31 Chicago railroads, at the request of the C. & N. W., together with written predictions by designers and news analysts on how the world will look in 2048.

The Centennial Train

The chief long-range feature of the North Western's celebration of its 100th anniversary was its centennial train. As previously described in *Railway Age*, the train comprised flat cars, bearing, respectively, the ten-ton "Pioneer" locomotive, a rubber-tired replica thereof, and a 70-ft. rubber-tired replica of a "400" streamliner, complete with bell and oscillating headlight. In addition, a baggage car, converted to a museum car, was fitted with a large collection of physical mementos, photographs and models recalling earlier days on the North Western. At most stopping points where parades were arranged the two rubber-tired replicas were rolled off the flat cars and participated in the parade under their own power.

The centennial train was "on tour" during the whole of May and June, visiting 58 cities on a 3,000-mi. tour covering every division of the North Western, reaching as far west as Casper, Wyo., and as far north as Duluth, Minn. In the course of the tour 30 cities held special centennial celebrations in which civic organizations participated actively. The railroad estimates that at least one million persons saw the train on parade and that about one-half million went through the museum car.

Following completion of its tour, the centennial train was broken up, the "Pioneer" going to the pagent "Wheels-A-Rolling" at the Railroad Fair in Chicago, and the rubber-tired replicas to the road's exhibit.

"Song of the Pioneer"

Produced during its centennial year by the North Western was an elaborate color-film motion picture called "Song of the Pioneer." Lasting 25 min., the film not only describes the work of the larger departments of the railroad in vivid operating scenes taken on the road, but also presents a series of separate historical dramas, including a scene of pre-railroad Chicago; the solicitation of farmers' stock subscriptions by President Ogden; the first run of the "Pioneer"; and the rescue of communities of settlers in Minnesota by the railroad during a severe blizzard.

The 100 available copies of the film will be shown first to employees, or to mixed groups of employees and their neighbors, after which it will be made available on a less limited basis to other groups in the Mid-west. The film was enjoyed by thousands at the North Western Playhouse at the Railroad Fair.

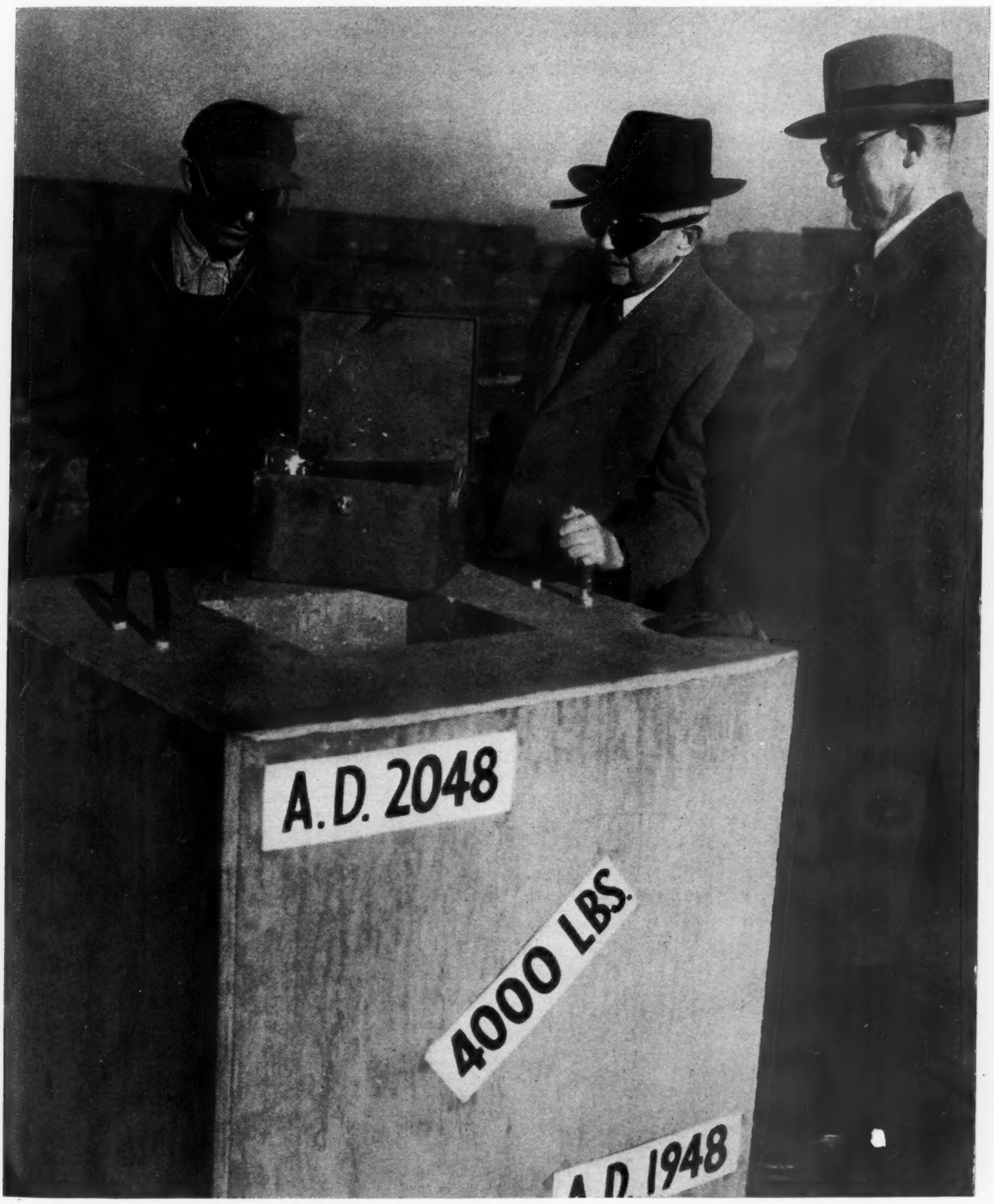
Next month there will be published by Wittlesey House, New York, at a price of $4, a popular history of the North Western system called "Pioneer Railroad," by R. J. Casey and W. H. S. Douglas, both veteran Chicago newspapermen. The book is based on original research and is said to contain many new findings about North Western history.

Memento Contest

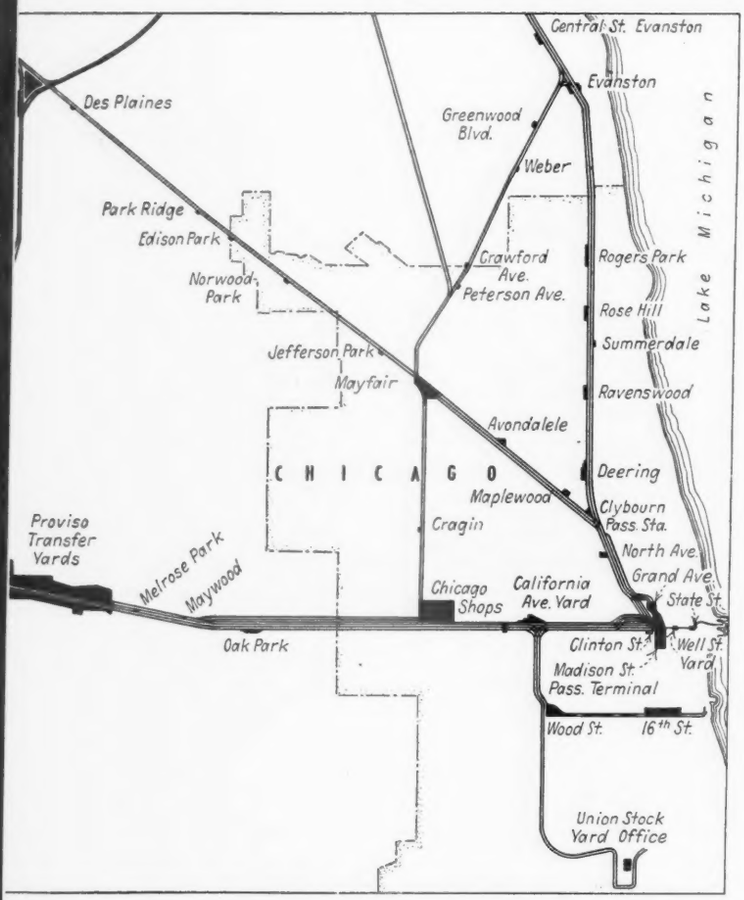
The North Western was able to gain a large number of "souvenirs" and much additional, hitherto—unrealized historial information through a memento contest which it sponsored among the historical societies of the Midwest. A first prize of $250 was awarded for the best anecdote and a similar award made for the best physical "souvenir."

It was a very easy matter for the North Western to interest a number of manufacturers in tying in their products with the road's centennial—particularly the likeness of its original locomotive, the "Pioneer," which also furnished the symbol for the popular Chicago Railroad Fair, though, in no instance, did the road contribute money toward these products or guarantee to purchase any. As the result of a suggestion by the road's public relations department, a national manufacturer of inexpensive knocked-down wooden models manufactured and sold more than 100,000 sets of a model kit of the "Pioneer," at an average price of 75 cents. Sales of this model are continuing to boom in all parts of the country. Early in 1948 the Textron

Corporation came out with a cotton material for dress goods, drapes, etc., using the "Pioneer" as its decorative *motif, a* large quantity of which has been sold. This material was used by the road for curtains in the Railroad Fair Playhouse and appears on the dining cars of the "400" streamliners as table cloths. The Glensder Manufacturing Company now makes a silk scarf decorated with many caricatures of early railroad scenes, including one with the "Pioneer." The Warner Wallpaper Company has come forth with a special design depicting this locomotive against a modern middlewestern background.



A box containing 500 photographs of railroading of today is sealed to be encased in the two-ton concrete "capsule" shown, which was lowered into the earth on the site of Chicago's first railroad station



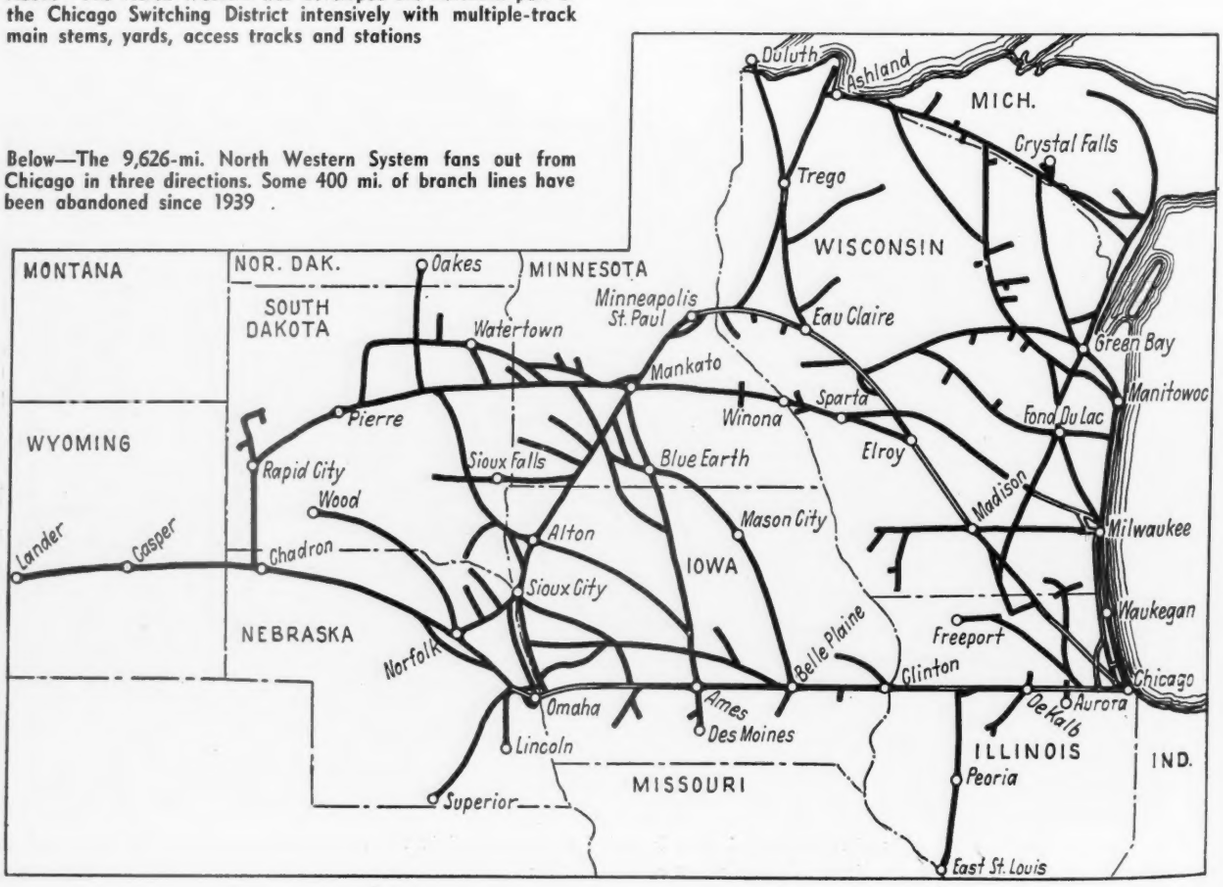
Above—The North Western has developed the northern part of the Chicago Switching District intensively with multiple-track main stems, yards, access tracks and stations

TODAY'S NORTH WESTERN—

[Because most data are reported separately for the two roads, this article on the North Western does not take account of the activities of the Chicago, St. Paul, Minneapolis & Omaha—or "Omaha Road"—because to do so would unduly complicate the exposition and statistics involved. The management of the C. & N. W. *system* deals with entities larger than those here shown, to the extent that the 1,567-mi. Omaha—having 19 per cent the mileage of the 8,063-mi. parent road—adds traffic, revenues and hard work—Editor.]

The Chicago & North Western is a fairly substantial factor in railroading in the United States, as the comparison of its plant and traffic with all Class I carriers herewith shows. In mileage, it accounts for 3.5 per cent of the total, in units of motive power, 2.4 per cent. Its passenger-train equipment is relatively greater than its freight-carrying stock. The road, which has a heavy commutation business, moved almost four per cent of all passengers carried in the country in 1947. As a freight carrier it accounted for a smaller propor-

Below—The 9,626-mi. North Western System fans out from Chicago in three directions. Some 400 mi. of branch lines have been abandoned since 1939



A PRODUCT OF MODERNIZATION AND ADAPTATION

Ready for the future with sound financial structure and improved property, the road will modernize and prune its plant further, despite special problems

tion of the national total, handling 2 per cent of tons carried, 1.7 per cent of ton-miles hauled, and earning 1.9 per cent of the revenues. The average journey of its passengers and haul of its freight were both below the national average.

An Extensive Network of Lines

The North Western extends from Chicago to the nine states of Illinois, Wisconsin, Michigan, Iowa, Nebraska, Minnesota, North Dakota, South Dakota, and Wyoming. It is a granger railroad. While its territory includes industrialized sections—such as the Chicago and Milwaukee areas and regions in central and northern Illinois, eastern and central Wisconsin and eastern Iowa—and it is an important carrier of iron ore to Lake Superior and Lake Michigan ports, nevertheless, the contribution of agriculture to its total business is exceedingly important. Over the last ten years, "products of agriculture" and "animals and animal products" have contributed about one-fourth of its gross freight revenues. In addition, farm activity gives rise to the movement of agricultural implements, fuel and countless manufactured articles, thereby accounting for a still larger part of the road's traffic.

The C. & N. W. *railway* comprises a total of 48 other corporations taken over by merger or purchase. All told, there are 135 different corporations in the "family tree."

Sole Reorganization Drastic

The C. & N. W. was an outstandingly healthy and profitable property until highway competition, depressed agricultural rates, the worst drouth in its history, and a prolonged general low level of business drove it into bankruptcy in June, 1935. On June 1, 1944, the road emerged from trusteeship with its debt chopped from $366 million to $210 million and fixed charges slashed by 75 per cent. Some $181 million of preferred and common stock—which, in the early Twenties had sold for as high as $150 and $108 a share, respectively—were wiped out, a move which was described by *Railway Age* as "a very significant event

C. & N. W. is building Diesel locomotive servicing facilities at Chicago costing about $2.5 million

AN EARLY NORTH WESTERN OFFICER

Dr. E. H. Williams was educated as a physician. While practicing in Vermont he had charge of a surgical case which won him worldwide reputation because he was able to save the life of a marble cutter, although a five-foot steel bar had passed through the patient's lower jaw and out through the top of his skull, as the result of an explosion. William's bent for things mechanical, however, caused him to quit the medical profession and, in 1859, he wound up as assistant general superintendent of the Galena & Chicago Union. Later he went into the Pennsylvania's shops at Altoona, Pa., and subsequently became general superintendent of that road. He ultimately became president of the Baldwin Locomotive Works, and, as that company's star foreign salesman, visited every corner of the world. While in Chile he encountered the man whose life he had saved—healthy and working as a stage driver!

in the history of the railways of the United States."

An important provision of the road's plan of reorganization was the establishment of a capital fund, which is written into the new mortgages, and which, since January 1, 1939—the effective date of the plan—has paid for all capital improvements. Into the fund are paid, monthly, amounts equal to depreciation charges on the property, charges against income for replaced retirements on non-depreciable property, and certain salvage recoveries from retired property. In the event roadway depreciation charges fail to meet certain requirements, there is provision for a direct contribution from income. The accumulations in the capital fund are definitely segregated and held in cash or government securities.

During its nine-year life, up to the end of 1947, there has been paid into the fund a total of about $106 million. From this amount, the road, during the same period, spent about $88.5 million—of which $25.9 million went for additions and betterments to fixed property and $62.6 million was for rolling stock, including improvements to existing equipment. The balance in the fund, at the close of 1947, was about $17.5 million, of which $3 million is specifically reserved for "emergencies" and $13.3 million is appropriated for improvements carried over for completion in 1948.

Drastic though its reorganization was, the C. & N. W. has subsequently used earnings to reduce its debt still further. In the three years 1945-1947, its management purchased $9,261,000 of new second mortgage income bonds. In weighing the conflicting demands of further debt reduction *versus* dividend payments, the road's directors have had to recognize, as President R. L. Williams put it, "the moral obligation to pay dividends," since all the company's present outstanding preferred and common stocks were issued to replace fixed interest-bearing obligations of the old company. Thus, such dividends as have been paid were, in effect, in lieu of interest. Future dividend distributions must be judged in the same light.

Postwar Improvements

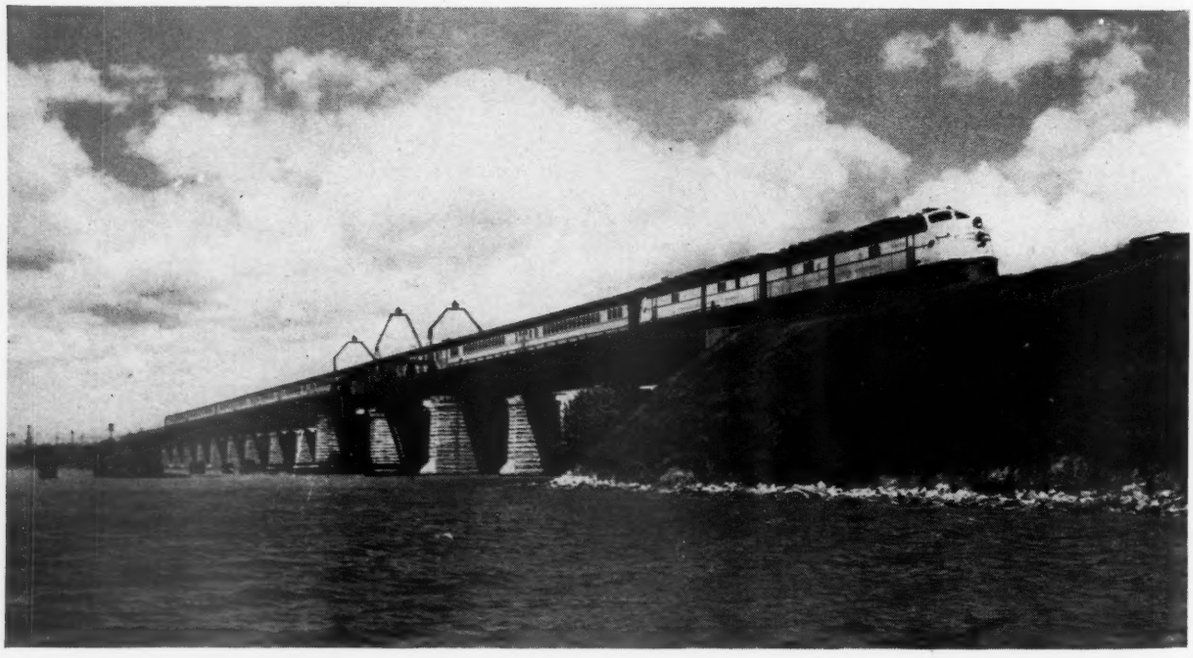
The "additions and betterments" account of the C. & N. W. shows equipment acquisition or improvements totalling $13.7 million in 1946 and $12.3 million in 1947.

Added to the road's locomotive roster during these years were the following:

8 1,350-hp. Diesel-electric freight locomotive units
39 1,500-hp. Diesel-electric freight locomotive units
19 2,000-hp. Diesel-electric passenger locomotives
15 Diesel-electric switching locomotives

Since January 1, 1948, the road has taken delivery of an additional 14 Diesel switchers, and has currently

Peninsula "400" crossing the Fox river in Wisconsin



A "SOUTH PAW" RAILROAD

Popular curiosity has long been aroused by the fact that trains on the North Western proper (not on the subsidiary Omaha road) run on the left-hand track in double-track territory. Strangers at suburban stations conscientiously climb to the platform other than that from which their train will run. Trains going to Chicago seem to run "on the wrong track."

There are other left-handed roads, like the Duluth, Missabe & Iron Range, and long stretches on many roads where, due to grade considerations, left-handed running is entailed, but none is so well-known for this peculiar trait as the C. & N. W.

Popular rumor has it that the road was built by British capital and that London financiers refused to come across with the money unless the railroad ran English style. False. The real reason is that the original stations on the old Galena road happened to be located on the north side of the line. When double-tracking of this line was started in 1855 (itself an unusual circumstance), the second track was added to the south of the original pair of rails to avoid moving the stations. But since the main function of the stations was to shelter passengers waiting for trains bound east to Chicago, the management decided to operate its railroad left-handed. All subsequent additions to the railroad were similarly arranged.

Left-handed running was not uncommon, even as late as the Eighties. Railroads saw no need to follow the practice of highways and indulged their whims in this regard. In 1885, *Railway Age* held that left-hand track was preferable for many reasons, the chief of which was that the engineer, sitting on the right side of the cab, can "command a full view of both tracks at once and, in rounding curves, can see farther along the rails than when he is on the right-hand track." The Illinois Central was once a left-handed road; the Alton had to spend a great deal of money converting its switches from trailing to facing point and rebuilding interlocking plants in a shift from left to right operation.

on order 7 Diesel passenger units, 58 Diesel freight units and 15 Diesel switchers.

During 1946 and 1947 the C. & N. W. installed 46 new streamlined coaches. It has yet on order 1 coach, 9 parlor, 11 sleeping, 13 dining, 3 club, 6 postal, and 4 baggage cars. Early this year it initiated a program of complete modernization of its fleet of suburban coaches, and has virtually completed equipping every train in suburban or main-line service with portable red oscillating tail signals. While the management does not propose to replace all of its conventional type cars with streamlined equipment immediately, it does plan to modernize its main-line through trains as rapidly as building capacity and its own finances permit.

Freight Car Installations

During the two postwar years the road installed the following new freight car equipment, all of all-steel construction:

1,300	box cars
400	gondola cars
647	hopper cars
140	covered hopper cars
300	flat cars
2,787	total

In addition, 495 rebuilt all-steel hopper cars were placed in service. The 3,282 new or rebuilt freight cars thus received in the two-year period fall considerably short of the approximately 2,300 new freight cars a year which the road needs to maintain its present ownership. Since the beginning of the present year the road has placed in service 1,437 new box cars and 165 gondolas rebuilt in company shops. On order are the following:

Box cars	605
Gondolas	550
Hoppers	502
Covered hoppers	19
Hoppers rebuilt in company shops	327

Improvements to Roadway

Gross expenditures for additions to and betterment of fixed property totaled $4,700,700 in 1946 and $5,-064,764 in 1947. Continuing on a still larger scale, such expenditures amounted to $4,447,620 during the first eight months of 1948, which was $1,380,000 more than was spent during the same period in 1947.

Outstanding roadway improvements performed or initiated during the two-year period included:

Diesel locomotive servicing and repair facilities at Proviso and Chicago shops, costing together about $2.5 million, and expected to be completed by the end of 1948.

Extensive flood control program through sections of Iowa, involving changes in grade and alinement and replacement of bridges to provide increased waterway openings. Experience during flood conditions in 1947 showed a very substantial return upon the expenditures already made in this project.

Modern coaling plants at Adams, Lowden, Council Bluffs, Boone and Belle Plaine, Iowa, Nelson, Ill., and Sparta, Neshkoro and Wausau Junction, Wis.

Passing tracks lengthened at 11 locations.

West yard, Clinton, Iowa, enlarged by construction of 4.5 mi. of track.

Five hump yard retarders at Proviso rebuilt.

Rail and flange lubricators installed at 36 points.

Passenger stations modernized at Clinton, Iowa, Marinette and Green Bay, Wis., Sterling, Ill., and Fremont, Neb.

Expenditures for maintenance of way and structures also have been on the increase in recent years, amounting to $24,516,000 in 1946 and $25,337,000 in 1947, while the 1948 budget contemplates expenditures for this purpose of approximately $29,000,000.

Signal and Communication Betterments

During 1946 and 1947 a total of 264.5 mi. of track were relaid with new 112-lb. control-cooled rail and modern fittings. A total of 421.8 mi. of track were ballasted and surfaced out-of-face—71 mi. with crushed stone, 46 mi. with slag, 282.5 mi. with gravel, and 22 mi. with cinders. In the same period, 2.7 million new crossties were installed, cuts and fills were widened and roadway pipe-drains, aggregating 132,742 lin. ft., installed. Pressure grouting, whereby a lean cement mixture is injected into water pockets by use of hydraulic mud jacks, was used to stabilize 38,630 lin. ft. of track.

During the years 1946 and 1947 the C. & N. W. installed or commenced the following important improvements in and additions to its signaling and communications facilities:

Centralized traffic control in double-track territory between West Chicago and Nelson, 75 mi., due for completion early in 1949, and expected to produce net savings in excess of 10 per cent on investment.

Automatic or remote-control interlocking plants installed at eight locations to replace manually-operated plants, resulting in annual savings of $37,600.

Automatic crossing protection installed at 22 highway grade crossings.

Total of 34 mi. of automatic block signals installed between Manitowoc, Wis., and Green Bay.

Type "C" carrier telephone system installed between Chicago and Milwaukee, 85-mi., and started between Chicago and Omaha, 488 mi., and between Chicago and Elroy, Wis., 204 mi., with completion due in 1948.

HOW C. & N. W. MEASURED UP ON NATIONAL AVERAGES — 1947

	C.&N.W. Extent of Plant	All Class I Roads in U. S.	C.&N.W. Per Cent of Total
Average mi. road operated	8,063	226,179	3.5
Locomotives owned*	1,036†	42,841	2.4
Passenger cars owned	1,258	36,458	3.4
Freight cars owned	43,872	1,744,852	2.5
No. employees	29,612	1,397,468	2.1
Passenger Traffic			
No. pass. carried (thousands)	26,976	706,038	3.8
Passenger-miles (thousands)	1,371,350	45,935,964	3.0
Passenger rev. (thousands)	24,677	963,322	2.6
Miles per pass.	50.8	65.1	78.0
Freight Traffic			
Tons carried (thousands)	56,926	2,896,463	2.0
Ton-miles (millions)	11,294	654,691	1.7
Freight rev. (thousands)	$131,796	$7,040,973	1.9
Average haul (miles)	198.4	226	87.6

*Figures for 1946, Class I roads only.
†Counting Diesel *locomotives*, not units, and including 9 jointly-owned locomotives.

The management of the C. & N. W. faces a number of inherent and serious problems in its effort to produce service and earnings. The North Western has a very heavy branch and secondary line mileage. Although it enjoys a high density of traffic on its main Chicago-Omaha, Chicago-Twin Cities and Chicago-Milwaukee routes, the remainder of its rail network is characterized by light, and often seasonal, traffic. The traffic density of the road's two chief competitors is substantially higher. Since 1925, when mileage operated reached its apex, the North Western has abandoned more than 400 mi. of light-traffic lines, reducing its mileage by almost five per cent. There remain many more such projects, which the management intends to pursue with resoluteness.

As shown in the table, the road suffers from cost and revenue disabilities arising from a shorter average haul for both passengers and freight than the national average. Similarly, it depends normally upon passenger revenues for about 20 per cent of its gross operating revenues, while the average Class I carrier earns but 11 per cent of its income from passenger business. Much of the passenger business the C. & N. W. handles is short-haul and commuter traffic, which is carried at a substantial loss. The road's suburban business, for example, produces a net deficit of about $1.7 million a year. The management is carrying on a vigorous campaign to raise fares and stimulate riding sufficient to overcome at least a part of this loss.

A greater proportion of the North Western's tonnage is less-carload, compared with that of all Class I roads —being 2.2 per cent in 1947, compared with a national average of 1.7. The road also suffers from the fact that it does business in a territory notable for a low level of rates, arising from political discrimination in favor of agricultural commodities. Finally, the traffic offerings of agriculture are highly seasonal, requiring large numbers of Class A box cars for immediate loading on a wide network of "granger" gathering lines, which are almost without activity except in harvest time.

Despite these handicaps the management has succeeded in improving operating performance substantially, as the following comparisons of years of relatively high traffic show:

	1920	1929	1947
Ton-miles per train-mile	450	510	939
Car-miles per freight train-mile	35	42	49
Passenger-miles per train-mile	68	53	104
Car-miles per passenger train-mile	6	7	8

This machine in the dispatcher's office at Chicago controls a 75-mi. centralized traffic control territory between West Chicago and Nelson, the nearest point on which is 30 mi. from the board

PROBLEMS IN HEATING LONG TRAINS

By L. H. GILLICK
Vice-President, Vapor Heating Corporation, Chicago

The basic requirements for heating passenger trains of any length come back to the amount of steam used per car per hour, which is dependent largely on the speed of operation. It has been found that a well-constructed and insulated car will use from 250 to somewhat over 350 lb. of steam per car per hour and that is the figure which is kept in mind in considering a steam source with Diesel or steam locomotives.

The length of train which can be heated depends on the size of the steamline from the locomotive through the train and the insulation of that steamline. The newer equipment which is now being built with 2½-in. trainlines can be heated satisfactorily if a volume of 350 lb. of steam per car per hour is available at proper pressure (ranging up to 250 lb. per sq. in.) from the locomotive and if the train is limited to not more than 16 to 20 cars in below-zero weather.

Train-line Size a Limiting Factor

When cars are of the older type with 2-in. trainlines, the problem changes because the 2-in. trainline in itself does not have sufficient steam carrying capacity to permit heating a long train. Experience shows that, while the cars themselves will use a maximum of 250 to somewhat over 350 lb. of steam per car per hour (depending on speed, weather, etc.), under maximum conditions the 2-in. train line will conduct steam back to heat properly only a 12 to 14-car train in below-zero weather at high speed. This is true whether the source of steam be a steam locomotive or a Diesel locomotive with a steam boiler of adequate size. Train-line size and insulation are the limiting factors.

Where trains longer than 12 to 14 cars with 2-in. train lines or 16 to 20 cars with 2½-in. train lines are contemplated, it is beginning to be accepted on the railroads that these trains must not be handled in below-zero weather at high speed, unless a boiler car of some sort is provided to take care of heating the last cars in the train. This boiler car could be the last car in the train and would furnish steam to the train line at that point.

There has been a tendency also to add more cars to trains than the boiler capacity of either steam or Diesel locomotives is adequate to heat. A train running at high speed must have a sufficient supply of steam to give a minimum of 20 lb. per sq. in. pressure in an air-conditioned car to heat it.

In some instances, the boiler capacity has been sufficient to take care of 12, 14 or 15 cars, and these same trains often operate with 16, 17 or 18 cars. The result has been that the trains cannot be properly heated under adverse conditions. The steam consumption obviously has a direct relation to the number of cars and the length of train line, and sufficient steam must be provided to fill that train line and heat all cars.

A new idea is now being developed of multiple boilers in Diesel locomotives to give excess capacity so that there will not be the tendency to have heating failures in cold weather for any minor deficiency which might prevent the boiler developing its maximum capacity. Multiple boilers should give considerably improved performance, because they will insure that, even though some slight falling under maximum capacity might develop, there will be a reserve of steam to take care of longer trains under the most severe conditions. In too many cases, boilers have to operate at 100 per cent capacity on Diesel locomotives in order to heat the cars which are being hauled, and, with the present limited maintenance time allowed, this high boiler output is difficult to maintain. Therefore, reserve steam capacity should improve heating conditions.

The problem of heating long passenger trains has each year come a little closer to solution. It is not a product of the Diesel locomotive. It comes when trains have too many cars or run at too high speed for the amount of steam supplied, whether the steam source be a steam locomotive or a boiler in a Diesel locomotive. It can be solved by a realistic evaluation of the steam requirements for any given train. If the boiler supply is inadequate to furnish the required amount of steam with a proper excess to protect against emergencies, then (1) fewer cars should be handled during severe winter weather; (2) additional steam should be made available possibly through the use of rear-end heater cars; or (3) additional capacity should be obtained by adding to the boilers in the Diesel locomotive. Always the size and insulation of the train line are limiting factors.

Insulation Also Important

Some railroads are recognizing the fact that larger and better-insulated train lines can materially improve these heating conditions and are adopting policies of replacing present 2-in. train lines with the new 2½-in. lines when cars are shopped. At the same time, these railroads are applying the latest and best approved practices in insulating steam train lines against wind wipe, radiation losses, and contact with car structure. Proper attention to insulation materially improves heating conditions in severe weather and those railroads most affected by cold weather should exert every effort to keep proper insulation on their train-lines.

Whenever the steam supply falls below a minimum of 20 lb. pressure in any car when the train is running at speed, proper recognition should be given to the need of an additional volume, or the length of the train must be reduced during severe weather.

In the future, it is felt railroads will insist on reserve capacities of steam to insure an adequate supply to take care of demands under all conditions. Equipment has been developed to insure such a supply.

IMPROVED 65- AND 80-TON GENERAL ELECTRIC SWITCHERS

The General Electric Company has announced improvements in its standard model 65- and 80-ton Diesel-electric switching locomotives which give increased power and improved continuous tractive-force ratings.

Down-the-track view over the left shoulder of the operator in the G. E. Diesel-electric 65-ton locomotive, showing the control panel (above).—A G. E. 65-ton, Class A, Diesel-electric locomotive (below) with all doors open

The new locomotives are each equipped with two supercharged Diesel engines with a maximum rating of 275 hp. at 2,100 r.p.m., or a total of 550 hp. per locomotive. This is an increase of 38 per cent for the 65-ton locomotive and 10 per cent for the larger model. The power actually delivered to the generators for traction is 420 hp. This compares with 330 hp. in the old model 65-ton unit, and 440 hp. on the old 80-ton locomotive.

Maximum tractive force has not been changed because there has been no change in the weight of the units. However, the continuous tractive-force ratings have been improved. The GE-747 motor with which new locomotives are equipped is a self-ventilating double-reduction motor that replaces the non-ventilated single-reduction motor used in the old models. The improved capacity of the GE-747 means that a given tractive force can be maintained for a longer period of time.

The GE-747 motor rates 5,200 lb. tractive force on a continuous basis. This is equal to 16 per cent adhesion on the 65-ton and 11.5 per cent on the 80-ton unit. The one-hour rating is 6,200 lb., equivalent to 19 per cent adhesion on the 65-ton locomotive and 13.8 per cent on the 80-ton locomotive. These high ratings enlarge the field of application and make it possible for them to handle the heavy jobs without blower equipment being added.

Other improvements on the new models are clasp-type brakes and Pullman steps on the lighter locomotive (standard on the 80-ton engine); hinged windows in front of the operating station; and a full metallic circuit with ground relay to provide a degree of protection from damage due to accidental grounding.

SHIPPER-CARRIER GROUP STRESSES DEFENSE OF FREE ENTERPRISE

Associated Traffic Clubs at Silver Anniversary meeting hear need for a revised National Transportation Policy, and for a rail plant ready in case of emergency; support of Army reserve units endorsed

With a record attendance of well over 800 members and guests, the Associated Traffic Clubs of America convened at their 25th annual meeting in Cincinnati, Ohio, October 18, 19 and 20, featuring on their agenda the preservation of free-enterprise transportation, and preparedness as a measure for best assuring peace. The meeting was held jointly with the American Society of Traffic and Transportation and the Associated Traffic Clubs Foundation—being the third annual meeting of the two affiliated organizations. Delegates were present from a majority of the 167 local traffic clubs which are embraced by the parent association, and there was a 96 per cent representation of its executives and directors.

T. J. Hargrave, president of the Eastman Kodak Company, Rochester, N. Y., who has just ended a 15-months' chairmanship of the United States Munitions Board, was the featured speaker at a luncheon on October 19, and Col. Robert S. Henry, vice-president in charge of public relations of the Association of American Railroads, addressed the members at a banquet that evening.

Preparedness a Foundation for Peace

Mr. Hargrave emphasized the need for a strong common carrier system, and the necessity for rates which would permit replacement and expansion in the transportation industry as well as in other industries. The former Munitions Board chairman stated that that body was keenly aware of the importance of transportation to national security, and outlined its three-point program, which includes (1) first priority to finding out just what demands will be made of the transportation lines in case of an emergency, (2) seeking ways to achieve the highest efficiency in the utilization of the transportation system in case of an emergency, and (3) isolating and eliminating potential bottlenecks before an emergency occurs. Mr. Hargrave explained that to assure a free flow of this all-important traffic, the Munitions Board had formed a "steering committee" which is working on the following objectives:

(1) Development of a uniform method to be used by the three military departments for estimating military requirements, and the use by all three of the same nomenclature and units of measurement;

(2) Coordination of transportation management within the three military departments to achieve uniformity, maximum utilization, and economy; and

(3) Procurement of the best attainable advice from the transportation industry itself.

Colonel Henry addressed the traffic clubs in much the same vein, urging that railroads be permitted to earn enough to put themselves "in such a degree of readiness as we have not heretofore anticipated" so that, in the event of an emergency, we would not have to "pay for time." The rail carriers alone, Colonel Henry stated, carry each day freight equivalent to 12½ tons one mile for each man, woman and child in the United States. He related this heavy transport job to economic freedom—permitting wide markets for producers, and wide choice of supply source for consumers. He asserted that recent freight rates increases had not affected prices unduly—that no coin minted in this country could express the increase in freight rates which is reflected in the average retail purchase of the ordinary consumer. He warned that "the idea of common carriage at terms known and equal to all" could be impaired by the pursuit of immediate reduction in its cost.

Need for Revised Regulation

William T. Faricy, president of the A. A. R., who was to have delivered the banquet address, suffered an attack of appendicitis and was hospitalized en route to the meeting. In a wire addressed to the A. T. C., he reported that he would miss attending the meeting "almost as much as my late-lamented appendix, with which I parted at midnight." The address which Mr. Faricy would have made, dealing with modernization of regulatory legislation, is to be incorporated in the official proceedings of the meeting, and reads, in part, as follows:

"The matter of improving the regulatory act is of profound importance to you who are shippers as well as to us who are carriers . . . [and you] have a great opportunity to contribute out of your sound judgment and practical wisdom to the improvement of the regulation of the transportation industry—to contribute either as traffic clubs, or through the leagues and associations to which you belong.

"The commerce act, as it is today . . . is complex,

verbose and confusing, with amendment placed upon amendment until it is like a Joseph's coat of many colors. There is great and immediate need for clarification, simplification and streamlining. Its inconsistencies should be eliminated, its inequities removed. Its scope should be broadened to include all agencies of transportation engaged in public service.

"The divided responsibility between the management of a regulated private industry and the regulating tribunal is a very crucial problem. As private enterprises, these regulated industries must earn sufficient revenues to maintain their service and to secure the necessary capital for improvements and betterments. They must meet competition. They must furnish adequate service. In these respects they are no different from all other private business.

Suggestions for Revised Regulation

"There is an important difference between the Interstate Commerce Act and the acts to regulate power and air transport. This difference originates from the atmosphere in which the acts were framed. The Interstate Commerce Act in its provisions covering railroad regulation was punitive and repressive. Despite changed conditions and a great number of amendments, it has not yet entirely lost that flavor. The Transportation Act of 1920 placed some responsibility upon the commission for the revenue and credit standing of the carriers. Further amendments have extended that responsibility. The statement of a national transportation policy standing in the forefront of the Act of 1940 announces the principles of fair and equitable regulation. They are in great need of effective implementation.

"I shall not attempt to outline here an entirely new regulatory act, but only to suggest a few important subjects for consideration.

"Should not the regulation of all agencies engaged in public service transportation be brought together within a single regulatory body? This seems a logical and reasonable thing to do. Where more than one agency regulates, there is sure to develop a kind of jealous competition in regulation, to the confusion and detriment of all agencies. This is especially true when one regulatory body is specifically charged with promotional functions.

"Should there not be provisions in the act that would permit any type of agency to engage in operating any other under proper supervision and without destruction of competition, wherever a better coordinated service can be afforded? Should not an agency be permitted to enter into another field upon the same terms and conditions as those applied to applicants that are not carriers in another field?

"Is it either fair or wise for another government agency to appear before the commission and take sides in any case not involving the government as a shipper?

"Are not the exemptions in some provisions of the act too broad? These avenues of escape permit such a volume of traffic to move unregulated as to interfere with regulation itself. The regulated carriers do not have a fair chance against the unregulated. The rise of the exempt and private carrier is making regulation of common carriers more and more difficult.

"There are differences in the rules and terms between types of carriers subject to the same act. There is need for modification here also. Modernizing our regulatory law, we believe, will aid the commission in its work, will relieve it of many cases.

"Is any strengthening of the regulatory laws needed to reduce the lag which occurs between the effective dates of general wage increases and of compensating general rate increases? Well-informed and experienced practitioners under the Interstate Commerce Act are practically unanimous in believing not. They feel that existing laws enable the commission to act at once . . . No single current problem in railroading is more important than finding a way of getting prompt rate relief where a general wage increase has gone into effect. The power to grant reparation is an adequate safeguard against ultimate over-payment of what is found just and reasonable. Since the time of Shakespeare, the law's delay—the time elapsed between the petition offered and the relief granted—has been the subject of complaint and even of lamentation, but in administrative tribunals particularly—which, after all, are not courts—it is one of the things that the progress of modern civilization can and will find ways to alleviate.

"There is still much to be done in bringing harmony between state regulation and federal regulation.

"All these questions must be tested in the crucible of public discussion. In shaping the pattern of tomorrow's transportation, they should be discussed and properly settled, for until these problems are properly solved, there cannot be the stability in transportation service or in rates which are so desirable."

What Do Traffic Men Want of Colleges?

William Way, Jr., professor of transportation and head of the department of transportation and public utilities, College of Business Administration, University of Tennessee, agreed that there was probably some inadequacy in university training for traffic men, but expressed doubt that the industry had asked the colleges to give the sort of training they would like their traffic department candidates to have. He added that many schools consider traffic training as vocational training, and therefore shun it, and that the traffic fraternity and particularly the American Society of Traffic & Transportation could render a tremendous service by apprising the educational institutions of the vital need for men trained in the traffic "profession."

L. R. Capron, vice-president, traffic of the Chicago, Burlington & Quincy, spoke of the importance of the American Society of Traffic & Transportation in making available a roster of high-qualified traffic men and women. Because of the society's high standards, he said, when it is fully established and traffic management is looking for qualified men—men who will ultimately develop into "traffic statesmen"—"it need depend no longer on recommendations that may be motivated by friendship or sympathy."

E. J. Buhner, chairman of the board of American Trucking Associations, stated that "our for-hire carriers" share with the railroads deep concern about the increase in the cost of doing business. "Demands for higher wages and costly contract provisions, plus

higher prices for original equipment and maintenance and operation items," he declared, "have pyramided costs and resulted in the need for higher rates." One factor in higher operating costs, Mr. Buhner stated, is traffic congestion on streets and highways. "Redesigning of docks and receiving and shipping areas in many industrial and commercial establishments," he said, "is the key to reduced costs for both shipper and carrier." Dwelling on the increased operating costs brought about by wartime neglect of roadways, Mr. Buhner discussed "super-duper highway building programs," the cost of which, he objected, "would fall heavily on highway users and particularly on motor trucks." Mr. Buhner stated that the trucking industry feels that increases in taxes levied against it "are only warranted for necessary highway improvements," and that "any such increase should be thoroughly and conclusively justified by its proponents."

Support Army Reserve Units

General W. J. Williamson, western representative, Port of Boston Authority, Chicago, described the building-up of an Army reserve organization with men carefully screened and fully qualified in traffic and transportation work, to be called to active duty only in the event of an emergency. Some 15 of the member clubs have already negotiated contracts with the Transportation Corps for the organization of such reserve units. A resolution was passed endorsing the participation by member clubs in the Army affiliation program.

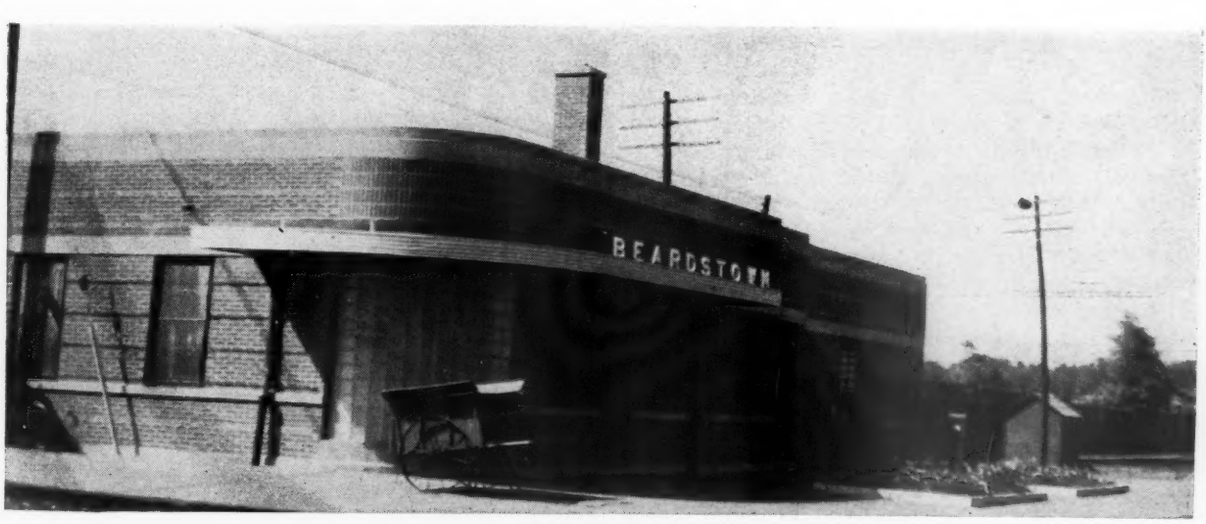
President Fred A. Doebber of the Associated Traffic Clubs Foundation, together with Carl Harris, head of a professional fund-raising organization, and Vice-President Joseph Finn of the Chicago advertising firm of Reincke, Meyer & Finn, outlined the promotional program of the foundation and urged cooperation of the member clubs in financial support of its activities. A presentation entitled "Meet your Traffic Manager," which is intended for distribution to principal business executives, was introduced. Plans for an advertising program in Fortune Magazine were discussed.

A.T.C. President Frank L. DeGroat reported on the organization's progress for the past year, citing the growth of member clubs to a total representation of nearly 50,000. He reported on an enlarged speakers' list, and on plans for immediate allocation of groups of clubs by areas to the regional vice-presidents, so that their advice and counsel could be sought in local problems and activities.

The following officers of the Associated Traffic Clubs were elected or re-elected: President, Frank L. DeGroat, general traffic manager, Schlitz Brewing Company, Milwaukee, Wis.; executive vice-president, J. P. Krumech, G.T.M., American Car & Foundry Co., New York; secretary-treasurer, R. A. Ellison, manager transportation department, Chamber of Commerce, Cincinnati, Ohio; and vice-president—education and research, Dr. G. Lloyd Wilson, professor of transportation and public utilities, University of Pennsylvania, Philadelphia. The nine regional vice-presidents were re-elected. John Duffy, vice-president, traffic of the Lehigh Valley, was elected a director to fill the vacancy occasioned by the resignation of Clarence A. Miller, vice-president and general counsel, American Short Line Railroad Association, because of ill health. All other directors were re-elected or continued in office.

C. H. Vayo, general traffic manager of the Eastman Kodak Company, was elected president of the American Society of Traffic & Transportation. Officers of the A.T.C. Foundation were re-elected.

J. M. Fitzgerald, vice-chairman of the Eastern Railroad Presidents' Conference, New York, continued in his office of board chairman of the A.T.C., and was honored for devotion of his time and energy to the welfare of the association by presentation of a bound book containing the business cards of more than 600 friends who contributed $5 each for sustaining membership in the organization.



Small, modern station on the Burlington at Beardstown, Ill., between Galesburg and St. Louis

MANAGEMENT'S INTEREST ESSENTIAL FOR SUCCESS IN SAFETY

Railroad Section of the National Safety Council holds three-day parley at Chicago, October 19-21; D. E. Mumford elected chairman

Some 250 railroad safety officers, meeting at Chicago last week, agreed that a safety program without the wholehearted cooperation of management from "top to bottom" is doomed to failure. The meeting—that of the National Safety Council's Railroad Section—was part of the 36th National Safety Congress and Exposition, which attracted 10,000 delegates to sessions in five separate hotels.

The keynote address of the Railroad Section was given by John W. Barriger, president of the Chicago, Indianapolis & Louisville, who spoke on the "Interest of Management in Safety." Other principal speakers were D. A. Fawcett, general manager of the New York Central System, Cincinnati, Ohio, and F. B. Lewis, superintendent of safety of the Union Pacific, Omaha, Neb. George D. Gaw, director of the Color Research Institute of America, Chicago, told briefly how the proper use of colors affects many personal problems influencing health and happiness. Presiding at the sessions was W. H. Roberts, superintendent of safety of the Chicago & North Western.

Speaking on October 19, Mr. Barriger said safety is the "end product" of good management, which takes on a new and enlarged significance in this honored role. A good safety record, he stated, is a valid proof of good operation, just as are fine property and equipment, high earning power and satisfied customers. Safe operations emphasize and underscore good management and vice versa, he said.

Safety a Basic Policy

"The work of indoctrinating an organization with high safety standards can no longer be regarded with doubts that it may impose interruptions to or interferences with normal operations," declared Mr. Barriger. "Instead, safety will take its rightful place among the basic policies which are continuously being utilized to build (1) superior physical standards into property and equipment, (2) progressive technical methods into planning, and (3) a high order of personal skill, experience and training into the organization. Those plans and procedures which facilitate production of better service at lower costs prove to be the most fertile ground in which principles of safety will flourish, and the latter will also nourish those other developments. This produces a natural 'community of interest' between safety and good management."

The Monon president termed safety as one of good management's "basic ingredients," adding that "this feature of administration cannot be delegated to anyone." Safety, earning power and property development, emphasized Mr. Barriger, are all closely related since each is the child of the same parent—superior management.

At another point in his address, the speaker observed that radar, television and radio phone communication hold vast possibilities for expediting trains and making operation safer in the future. "It is indeed possible to visualize most train accidents, other than those directly resulting from track and equipment defects, as ones which should be preventable by the further development and general railway utilization of devices of this character."

Declaring that minimum interchange requirements must be raised for freight cars, Mr. Barriger stated: "We must now foresee the necessity of soon voluntarily prohibiting the use of any freight car for interline loading which cannot safely be placed at the head end of the longest and heaviest and fastest freight train that runs anywhere in America. The way to get 'jalopies' off the railway is to have a low differential per diem or mileage rate for equipment of advanced age or of such general design as makes it obsolete or inadequate for modern freight transportation."

Continuing, Mr. Barriger referred to hot boxes as a problem of "greater seriousness" than is usually recognized. He said: "There is no single thing which will contribute more completely to safety on the rails than to reduce hot boxes to the status of really infrequent and extraordinary occurrences. The control of this problem is deserving of continued study of the highest technical type which the railways and the equipment industries can marshal for this important work. Meanwhile, redoubled efforts must be made to establish better hot box preventive maintenance practices."

Mr. Fawcett on "Train Accidents"

Mr. Fawcett spoke at the October 20 session on "Train Accidents." He employed Interstate Commerce Commission statistics to point out that employee negligence in 1947 was the cause of 7,090 accidents out of a total of 16,816. He attributed this record to a relaxing of proper obedience to the rules. For train and engine service employees, responsibility for this attitude rests largely with trainmasters, road foremen of engines and yardmasters, he stated.

The speaker said that of 74 collisions investigated by the I.C.C. 29 were due to failure to control speed of trains in accordance with signal indication or existing rules and instructions. Posing the question, "What are we doing about it?", Mr. Fawcett stated: "I believe it can be safely said that the managements, to the best of their financial ability, are doing their part in furnishing devices that will provide improved operation. Back in 1910 there were but 13,000 miles of railroad equipped with automatic signaling. This has risen steadily until today we find approximately 73,000 miles so equipped, or nearly 70 per cent of the mileage. . . .

"However, with all the automatic and foolproof devices at our disposal we still have an important factor with which to deal—perhaps it should be said to be the most important of all—and that is the failure of the human element. It is here that supervision has a real obligation. Yes, a solemn duty."

Speaking briefly on the employment of new men, Mr. Fawcett emphasized that the new employee should not be cast adrift to "sink or swim." Instead, management must keep in contact with him to make sure he is started on the "right path." Negligence in this respect too often produces a poor employee out of a potentially good one, he concluded.

Danger Operating Hand Brake

Discussing "Train Service Accidents," Mr. Lewis dealt particularly with those involving employees who fall from cars. He said the situation is "out of control" and that such accidents occur "day after day," despite education, posters and other media employed to combat them.

The speaker observed that the most precarious place for a man on moving equipment is on the brake step. In this connection he said: "The brake step is now being made of metal, which is vastly superior to that made of wood. Now we should give attention to its size and location. The practical way and the only way to insure a positive reduction or elimination of any type of accident is to make it virtually imposible, through protective means, for a man to get hurt when performing that particular operation."

The hand brake, said Mr. Lewis, can be surrounded with a virtually foolproof arrangement. First, he suggested that the brake step be widened and the usable length be increased to permit both feet to be placed firmly on the step. Second, he said, a railing approximately hip high can be attached to the steel end of the car, enclosing the outside edge of the brake step. This arrangement, he said, would provide a definite measure of security to avoid falls. Railing could be applied to running boards without much difficulty, added Mr. Lewis.

"These measures cannot be handled tomorrow," said the speaker. "They should be contemplated in new equipment to keep pace with needs of humanity, to lend a helping hand to those we are anxious to help. We have sufficient experience behind us to justify a thorough exploitation of construction measures that will make it safer for men to operate hand brakes and to move about on the tops of cars."

During panel discussions on October 20 and 21, brief papers were presented on a variety of subjects, ranging from "Agents' Responsibility in the Promotion of Safety" to "Cooperation Between Supervisors and Shop Safety Committee." Some individual observations of these discussions were as follows: Management must let the employee know that it is interested in his welfare and that it is not just "talking" safety; if the foreman is too busy to devote any personal time to the safety education of his committeemen and employees, "we can't expect a great deal of improvement"; good discipline administered fairly and justly cannot be overrated, and often a "pat on the back and a kind word" would bring greater results than an admonishment; and the hand-brake instruction car of the Chicago, Milwaukee, St. Paul & Pacific has proven of "inestimable value," having been used in the instruction of 4,500 trainmen.

Participating in the panel discussion on non-train accidents, H. B. Pilcher, superintendent of safety of the Wabash at St. Louis, Mo., outlined nine prerequisites for an effective railroad safety program. They were: (1) Wholehearted, liberal, enthusiastic and sincere support of top executives; (2) effective supervision; (3) a safety department headed by experienced and capable personnel in sufficient force to administer the program with intelligence; (4) rigid pre-employment requirements as to intelligence, fitness and physical condition; (5) an educational program, not as a by-product of safety, but as the first requirement; (6) rule compliance; (7) preventive maintenance; (8) investigations; and (9) prevention of malingering.

Committee Reports

A large portion of the first day's session of the Railroad Section was given over to the reports of committees. The Committee on Statistics observed that the "trend of accidents is definitely downward." It pointed out that during the first six months of 1948, as compared with the corresponding period of 1947, the number of train accidents dropped from 6,348 to 6,126; accidents resulting in injuries decreased from 438 to 339; the total of all fatal injuries to all classes of persons, except trespassers, dropped 21 per cent; and non-fatal injuries dropped 10 per cent.

The statistics committee observed also that the number of train accidents caused by "negligence of employees" decreased during the first six months of this year. On the other hand, a slight increase was noted in the number of such accidents caused by "defects in or failure of equipment," and only a slight decrease was made in those accidents attributable to "defects in way of structures."

The membership of the section was reported at an all-time high of 104 railroads, an increase of 14 over last year. Members now include all railroads in the country having a mileage of more than 800 miles.

D. E. Mumford, superintendent of safety of the New York Central System at New York, was elected chairman of the section for the coming year. Other new officers are: *Vice-chairman*, R. P. Hamilton, superintendent of safety, St. Louis-San Francisco, St. Louis, Mo.; and *secretary* and *News Letter editor*, J. R. Thexton, superintendent of safety, Delaware, Lackawanna & Western, Hoboken, N. J.

The incline and classification yard as seen from the top of a 100-ft. light tower in the vicinity of the retarder yardmaster's office

All photographs courtesy of the Union Pacific

BUILDS SECOND LARGE RETARDER YARD TO IMPROVE OPERATIONS

Modern $3,500,000 facility, constructed by Union Pacific at North Platte, Neb., is similar to one recently completed at Pocatello, Idaho—Has latest features in design, equipment and communications

The second large modern retarder yard to be completed by the Union Pacific in the past year has been placed in service—this one at North Platte, Neb. Built at a cost of $3,500,000 the new yard is somewhat larger than a similar yard completed last fall at Pocatello, Idaho*. The North Platte yard follows the same general pattern as the earlier yard in its design and arrangement and the modern character of the facilities provided for expediting the classification of cars. These include teletypes for transmitting train consists, talk-back loud-speakers for communication between various points in the yard, and two-way radio systems that provide contact between the yardmasters and the crews of yard locomotives.

*A detailed description of the yard at Pocatello appeared in *Railway Age* of January 10.

North Platte is 281 mi. west of Omaha, Neb., on the company's double-track main line. Previously, the yard facilities there consisted of 20 tracks on which cars were classified by a conventional flat-switching operation. The new yard is five miles in length over all and is divided into four major sections—a receiving yard, the incline, the classification yard and a departure yard. It is designed for classifying both eastward and westward traffic.

Construction of the new yard is in line with the road's policy of modernizing its facilities and of consolidating classification work at fewer terminals, reducing detention and permitting an increase in the average tons per train. With respect to eastward movements, the classification of traffic at North Platte for the Council Bluffs (Iowa) and Kansas City (Mo.)

gateways, and further classifying of cars for delivery to connecting lines, results in reduced switching at the latter points and expediting deliveries to connecting roads.

In handling westward traffic at North Platte separate classifications are made for Colorado, the Southwest, the West and the Northwest, thereby reducing the amount of switching required at other terminals.

In the new layout at North Platte the receiving yard, the incline, the classification yard and the departure yard are arranged in this order from west to east and are in line with each other. The eastward and westward main tracks skirt the south and north sides of the yard, respectively. The receiving yard has 12 parallel tracks having a maximum length of 6,262 ft. This yard is divided into two parts, one for eastbound and the other for westbound trains. The classification yard has 40 tracks ranging in capacity from 15 to 42 cars, and the departure yard has 16 tracks, also arranged in groups for eastward and westward traffic. The total capacity of the yard is 4,400 cars, including 1,400 for the receiving yard, 1,400 for the classification yard, and 1,600 for the departure yard.

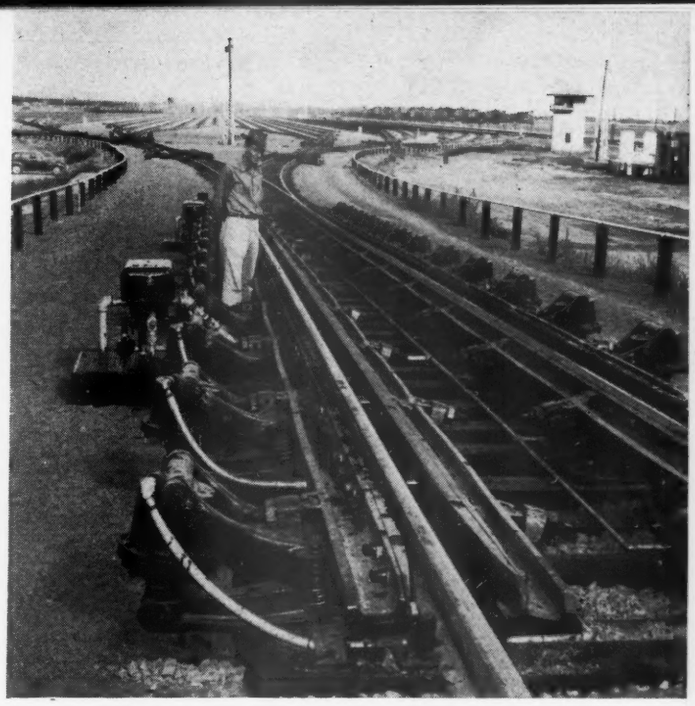
Has Group Arrangement

In the classification yard the main lead down the incline divides into two tracks, each of which serves as the lead for half of the yard which is symmetrical about the longitudinal center line. On each side of the center line the tracks are divided into three groups, with a separate lead for each group. The yard has nine car retarders of the electro-pneumatic type, one on the incline track, one each on the leads to the two halves of the yard, and one on the lead to each of the track groups.

On the approach to the classification yard the lead rises on a grade of two per cent to the crest and then declines on a grade of four per cent through the first retarder, the purpose of this latter grade being to accelerate the speed of the cars and obtain sufficient separation between them to permit operation of the switches. Through the retarder in the lead to each half of the yard the grade is 1.62 per cent, and the lead for each group is on a grade of 1.5 per cent, 1.64 per cent or 2.02 per cent, depending on the group. The body tracks of the classification yard have a descending grade of 0.2 per cent.

All switches in the classification yard are of the power-operated type. These switches and the retarders were furnished by the Union Switch & Signal Co. For controlling the switches and car retarders, three control towers are provided. At the crest of the incline is another tower housing the office of the retarder yardmaster. This office is on the second floor of the tower on the side next to the incline track and has windows on three sides to give the retarder yardmaster an unobstructed view of the receiving yard to his left, the classification yard to his right, and the cars moving over the crest in front of him. Eleven 100-ft. steel floodlight towers illuminate the incline and the classification and departure yards for night operation.

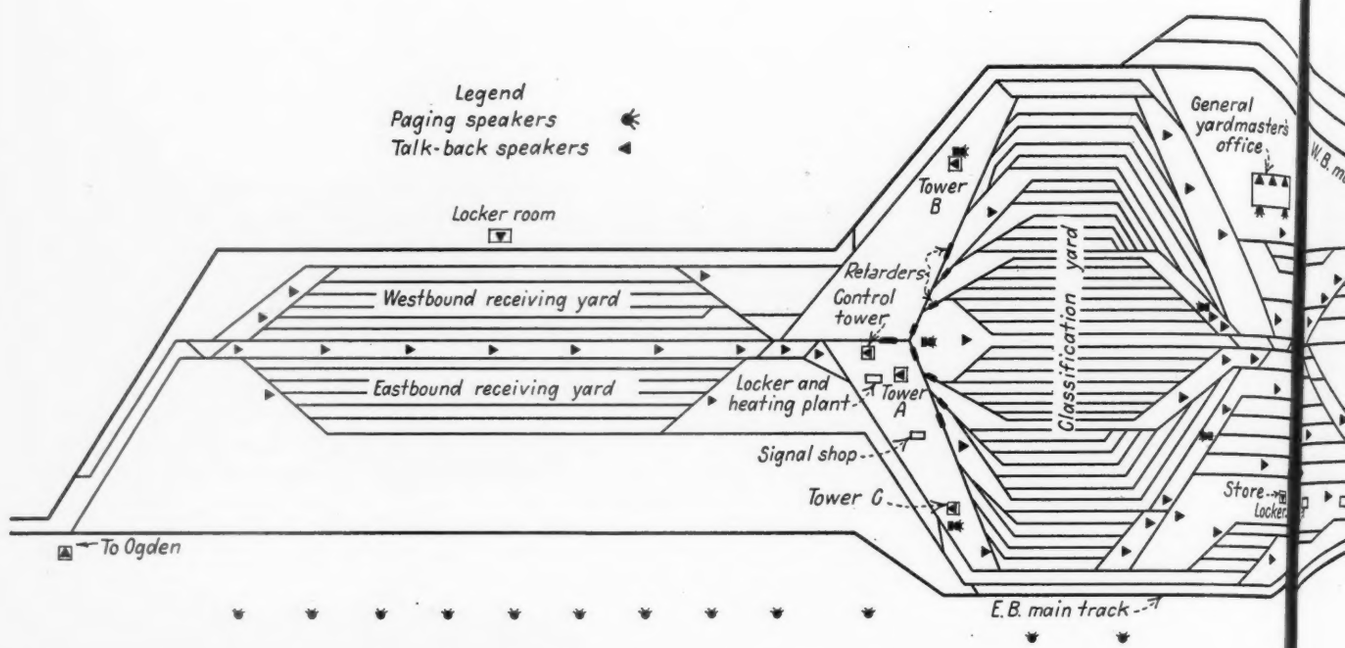
Other new buildings constructed as part of this project include an office for the general yardmaster which,



The car retarder on the incline has 28 air-activated cylinders, and is the largest of the yard's nine retarders

G. R. Van Eaton, superintendent of telegraph of the Union Pacific, inspects the intercommunication system control panel in the tower atop the general yardmaster's office

Interior of the retarder yardmaster's office. Removing consist from teletype machine is E. H. Bullock, assistant signal engineer of the Union Pacific

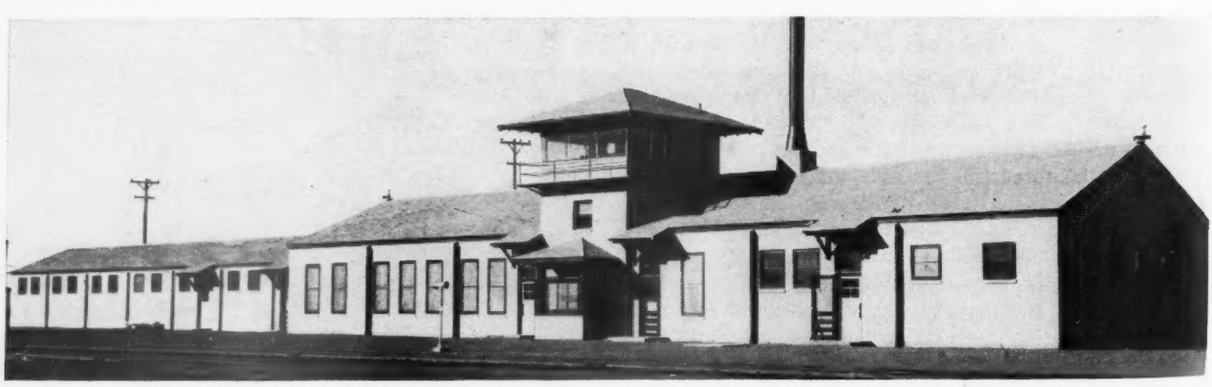


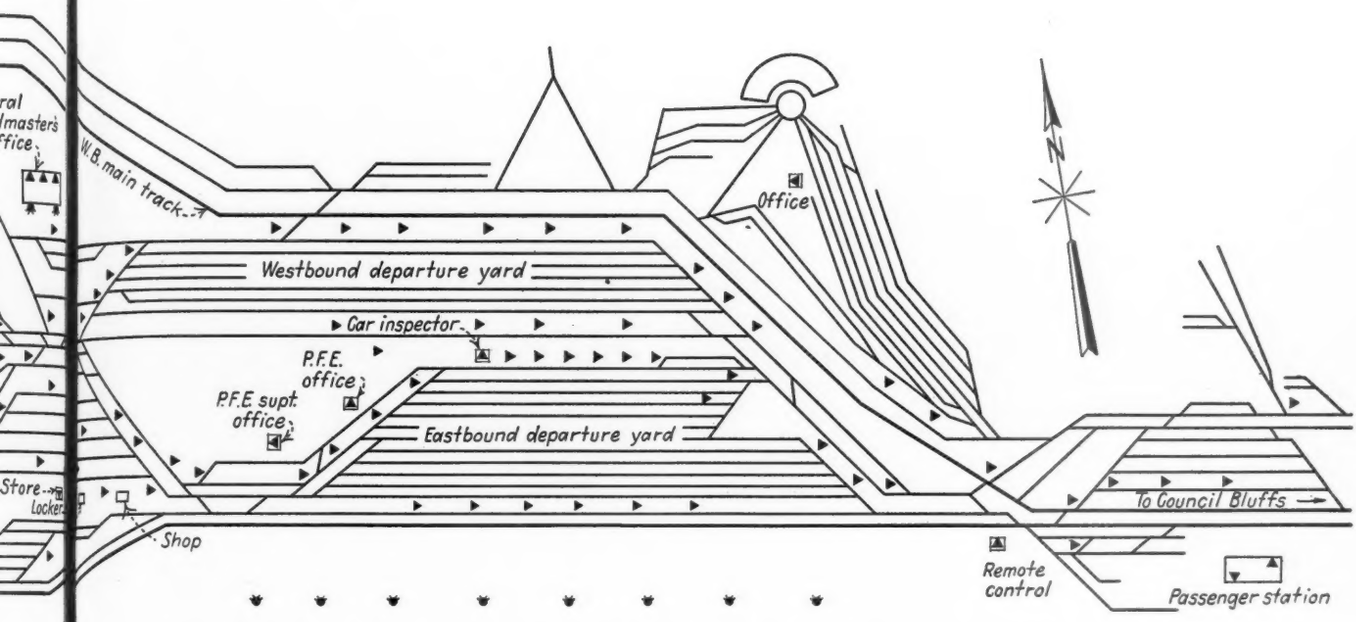
Above—Five men stationed in the pit and houses here shown inspect all parts of the cars as they move up the approach to the crest. Below—The general yardmaster's office building with its multi-windowed tower. Structure at far end contains locker room for trainmen

topped by a multi-windowed tower, is located between the classification yard and the departure yard. This structure is 38 ft. by 122 ft. in plan, and at one end is adjoined by a locker room for trainmen, which is 24 ft. by 104 ft. in plan. Also there is a locker room for carmen (24 ft. by 84 ft.), a locker room for switchmen (20 ft. by 42 ft.), a store building (24 ft. by 100 ft.), a shop building (24 ft. by 64 ft.), and garage and compressor buildings. All are of brick and concrete construction and have asbestos shingle roofs.

Car Inspection Facilities

As cars move up the approach to the crest from the receiving yard they pass a station where warm oil is injected into the journal boxes to assure the proper acceleration as the cars move down the incline. Beyond this point on the approach to the crest the cars pass a station where they are thoroughly inspected for defects. The structure for this purpose embodies an enclosed pit between the rails, from which the under sides of the cars may be inspected through shatterproof glass windows; a pit on each side of the track from which the sides of the wheels and trucks may be conveniently seen; and an inspection house on each





Diagrammatic plan of the new North Platte yard, showing locations of the intercommunication and paging units

side of the track, from which, through a window at the proper level, a carman may inspect the car roofs, running boards, grab irons and brake wheels. The inspection station will be described in more detail in a subsequent issue of *Railway Age*.

When a defect in a car is detected at the inspection station, talk-back loud-speakers are used to announce the fact. If it is decided that the car should be repaired it is allowed to roll down the incline but is switched to complete repair-track facilities which include five concrete repair platforms totaling 8,000 ft. in length.

One of the most notable features of the yard is its network of communications. This includes a teletype system linking the general yardmaster's office, the retarder yardmaster's tower, the three control towers, and the office of the Pacific Fruit Express, located at the yard. Switch lists are transmitted by teletype from Grand Island, Neb., for trains from the east, from Hastings, Neb., for trains from the south, from Cheyenne, Wyo., for trains from the west, and from Julesburg, Colo., for trains from Colorado. These switch lists are received in the general telegraph office at North Platte on typing reperforators and are retransmitted to various points in the yard.

An intercommunication system for the general yardmaster's use includes 110 two-way, talk-back Racon speakers located at advantageous points throughout the yard. In connection with this system there are 23 Western Electric paging speakers divided into four groups covering various sections of the yard.

A separate intercommunicating and paging system is operated from the retarder yardmaster's tower. This system embodies four Racon speakers, two at each end of the classification yard, and four Western Electric paging speakers, two of which are also placed at each end of the classification yard. A third intercommunication system provides a hook-up between the general yardmaster's office, the retarder yardmaster's tower, the three control towers for the classification yard, the locker rooms, and the inspection pit on the approach to the crest. This system utilizes Racon speakers and amplifiers furnished by the Electronic Communications Equipment Company.

Two Radio Stations

Eight Diesel switch engines at the yard are equipped with Motorola two-channel, two-way radio apparatus. For communicating with these locomotives there are two fixed radio stations. One of these, KBVH, is located in the retarder yardmaster's tower, with a triple-skirt antenna mounted on the top of the tower. In the other fixed radio station, KBVI, the controls are located in the tower of the general yardmaster's office. The antenna for this station is mounted on a 100-ft. light tower about 200 ft. from the yard office, and the radio equipment is contained in a steel case at the base of the tower. By manipulating a switch on the panel of the radio set in each locomotive the set may be made to operate on the frequency of either of the radio stations, depending on whether the locomotive is working under the supervision of the retarder yardmaster or the general yardmaster.

Before the new yard could be built it was necessary to acquire 213 acres of additional right-of-way. It entailed the building of nearly 6 mi. of new main-line tracks and about 51 mi. of additional yard tracks.

The yard was built under the jurisdiction of W. C. Perkins, chief engineer of the Union Pacific. The installation of the signals, power switch machines and retarders was under the direct supervision of L. D. Dickinson, general signal engineer, now retired, and his successor, T. W. Hays. G R. Van Eaton, superintendent telegraph, had charge of the design and installation of the communication facilities.

GENERAL NEWS

Shortage of Box Cars 50% Below Last Year

Gass, however, sees continuation of "heavy" demands for equipment

Although recent demands for box cars in the southeast, central east and southwest sections of the country for movement of agricultural products have exceeded the car supply, shortages reported have been only about 50 per cent of those reported in the same 1947 period, it is disclosed by A. H. Gass, chairman of the Car Service Division of the Association of American Railroads, in his latest analysis of "The National Transportation Situation."

At the same time, Mr. Gass reports that current indications are that the out-turn of all box car crops will be about eight per cent greater than the all-time record established in 1946. "From these indications," he adds, "we can anticipate that until such time as all crops have reached storage facilities the car supply will be inadequate to meet all needs currently and that from now until the first of the year some difficulties will be encountered."

Stock Cars in Demand

As for other types of closed cars, Mr. Gass reports that while the auto car supply continues to be adequate, demands for stock cars have increased materially over all range territory. "Every effort is being made to augment western car supply with cars released from eastern railroads and substantial help has been provided," the C.S.D. chairman states. "We anticipate that the shortage of this type equipment will be alleviated and that demands will decrease rapidly because with the heavier volume loadings at present the stock shipping season should be shorter than ordinarily would be the case."

With respect to the hopper car situation, Mr. Gass observes that, although there has been a "general slackening" in demands for open top cars to haul coal, shortages aggregating about 15,000 cars weekly, as compared with 40,000 to 45,000 weekly during the early summer months, are still being reported on several railroads. "As indicative of the general softening in the coal market, particularly bituminous," he adds, "during the week of October 9 a daily average of 5,391 cars of unbilled coal were reported held by the railroads as compared with 948 daily average during the week ended June 5, and 1,168 held in the week of October 11, 1947."

The C.S.D. chairman also has reported that (1) the Lake coal program for 52 million tons during the season of open navigation seems "well on its way to fulfillment," with 81.6 per cent having been shipped by October 4; (2) revenue coal loadings, while continuing to trail those of 1947, are off only 1.8 per cent at present, whereas last April, at the end of the suspension of mining, the deficit was 13.4 per cent; (3) the 1948 production of bituminous coal is seen amounting to about 590 million tons, as compared with the 1947 record output of 620 million tons, while anthracite production as of October 9 amounted to 44,450,000 tons, or 0.2 per cent above the output at the same time last year; and (4) the Lake ore program is expected to fall short by approximately two and one-half million tons of the 86-million-ton program.

"Our reports covering loading of hoppers with all commodities reflect heavy movements of road building materials, ore, coke and limestone, as compared with the loadings of these commodities in 1947," Mr. Gass continues. "For 41 weeks to October 9, a total of 10,922,261 hoppers were loaded . . . for an increase of 249,112 hoppers or 2.3 per cent over the 10,673,149 loaded in the corresponding period of 1947."

The Gondola Situation

Mr. Gass states that although gondola loadings are 3.6 per cent under 1947, "severe shortages" have been reported recently in practically all sections of the country. In order to alleviate that situation, he adds many railroads are ordering additional gondolas in the hope that they may be better equipped to take care of continued heavy demands for such equipment anticipated in 1949.

At the same time, the C.S.D. chairman reports "no relaxation" in the requirements for covered hoppers, loadings of which are up 14.8 per cent over 1947; and "heavy" demands for refrigerator cars, the loadings of which have increased from 31,545 cars in the last week of August to 38,138 in the first week of October. "It is the season when the heaviest loading areas are furthest apart," he adds, "and a time when prompt unloading and handling of refrigerator cars is of the most importance."

Frederick Bramley (left), secretary of the Canadian Pacific, accepting from Weston Smith, vice-president of the "Financial World," the bronze and silver "Oscars of Industry" won by the C.P.R. for its 1947 annual report. The road received the silver prize for the best 1947 report in all Canadian industry and the bronze award for the best report of a Canadian railroad. Presentation was made at a banquet in New York on October 21. The Canadian National was incorrectly named in last week's *Railway Age* as the winner of the silver trophy

With respect to new equipment, Mr. Gass' statement shows that the average monthly delivery this year of new cars to Class I roads and affiliated refrigerator car companies has totaled 8,650. "Adding deliveries to other private car lines brings the total up to an average of 9,395 cars, which after all is not a discouraging figure," he asserts. "It is also worth noting that total deliveries . . . are slightly over the number of new cars delivered during the same nine months of 1947; for gondolas and hoppers, over three times as many and for box cars over one and two-thirds as many."

Although freight car retirements continue at a heavier rate than last year, the report adds, total ownership shows an increase of 20,627 cars for the first nine months of 1948. It goes on to point out that installation of new locomotives in September totaled 165—150 Diesel-electric and 15 steam—or nearly twice the number reported in August and the highest number installed in any month since October, 1947.

Among other things, the report also discloses that the average turn-around time in September totaled 13.42 days, as compared with 13.23 days in August; and, for the month of September, the average detention of freight cars over the free time of 48 hours was 17.16 per cent, as compared with 16.15 per cent in August.

Increases Allowances For N. Y. Pier Services

I.C.C. orders higher payments for car floatage and lighterage

Increased allowances out of line-haul rates for car floatage and lighterage performed by railroads serving New York have been prescribed by the Interstate Commerce Commission in its report on the complaint filed more than four years ago by the Central of New Jersey. The proceeding was docketed as No. 29162, and the commission's report was accompanied by a dissenting-in-part expression from Commissioner Aitchison with whom Commissioners Splawn, Rogers and Mitchell agreed.

Although the Jersey Central was a lone complainant, the higher allowances, which must be made effective on or before January 5, 1949, will apply to all roads performing floatage or lighterage in New York harbor. In that connection, the commission recognized "the practical necessity for uniformity in allowances. . . . in order to prevent diversion of traffic from harbor lines that may increase their allowances to competing harbor lines that do not make such increases." All harbor lines other than the Jersey Central joined their own and the complainant's connections in opposing increased allowances at the hearing and on brief; but only two—New York Central and Baltimore & Ohio—were parties to exceptions filed by defendant railroads to the proposed report by Examiners A. R. Mackley and J. P. McGrath, who recommended higher allowances but would have put them on a basis different from that now prescribed by the commission (see *Railway Age* of November 1, 1947, page 53).

For all car-float service the commission prescribed an allowance of 6 cents per 100 lb. For lighterage service it prescribed a basic allowance of 11 cents per 100 lb., but provided that this amount shall apply only to shipments on which the joint line-haul rates are 26 cents or more. Where line-haul rates are less than 26 cents, the lighterage allowance will range from 6 cents, when the line-haul rate is 16 cents or less, to 10.5 cents, when the line-haul is 25 cents. The finding further stipulated that these amounts shall be increased by the same percentages that the related line-haul rates have been increased pursuant to commission decisions in Ex-Parte 162, No. 28300 class-rate investigation, and Ex Parte 166. Like the present allowances, the newly prescribed amounts will be deducted from the joint rates into New York before prorating; and the remainder will be prorated on the basis of divisional arrangements among participating line-haul roads.

Although there are exceptions, the present allowance on most traffic, whether floated or lightered, is 4.4 cents per 100 lb. Among the exceptions is grain traffic on which the allowance is 3.3 cents per 100 lb. The Jersey Central proposed a formula for the determination of allowances in terms of percentages of the joint rates on the traffic involved. Application of the formula to harbor services performed by the complainant in May, 1944, indicated that the allowances sought would have averaged approximately 6.8 cents per 100 lb. for car floatage and 15.4 cents for lighterage.

No Retroactive Adjustment

While the proposed report had recommended a retroactive adjustment for the Jersey Central from the date it filed the complaint (July 3, 1944), the commission rejected the recommendation. It noted that its authority to require a retroactive adjustment would be limited to joint rates it has prescribed, and not to rates made by the carriers pursuant to general permissions in ex parte proceedings. The report went on to point out that joint rates into New York which were prescribed by the commission have been subjected to general increases in the ex parte proceedings of recent years "without consideration of the reasonableness of particular rates."

"It is questionable, therefore," the report continued, "whether those rates, as thus modified, are rates in respect of which we have the power to require an adjustment of allowances to be received by the Jersey Central subsequent to the date of filing of the complaint and prior to the effective date of the order herein. There is also uncertainty as to just when the allowances, from the standpoint of the costs of performing the harbor services and of the relation of such costs to the joint rates, became unjust, unreasonable, and inequitable."

Line-Haul Lengths

The complaint was based on the Jersey Central's general contention that the assailed allowances were insufficient to cover the cost of lighterage and float service, and that the deficiency was particularly burdensome to the complainant because of its short rail hauls. "Complainant," the commission said, "characterizes the Jersey Central as essentially a terminal carrier. Its longest rail haul is 191 miles. . . . Its average haul on interline traffic is 91 miles. It therefore is not enabled to recoup, from its line-haul revenues, of which it receives a division in addition to the harbor allowances, the loss sustained on its harbor service."

"By contrast," the report continued, the lines of some of the harbor defendants, such as the N.Y.C., B.&O., Erie, and Pennsylvania, extend to or beyond Chicago, and these carriers "receive the entire revenues on New York harbor traffic local to their lines, and the divisions of joint rates to and from the divisional gateways on interterritorial traffic." The report also noted at this point that the N.Y.C. and B.&O. (as did the Erie and P.R.R. at the hearing

WATERWAYS ANTICIPATE GREATER TRAFFIC AS RAIL RATES INCREASE

Operators of inland waterway lines are preparing to handle in the near future an even greater volume of traffic than at present, as a result of recent increases in rail freight rates, according to a statement in a recent issue of Waterways Journal attributed to Chester C. Thompson, president of American Waterways Operators, Inc., an association of private inland water carriers.

"Freight moved over the inland waterways this year," Mr. Thompson was quoted as saying, "is already expected to show about a 30 per cent gain over the 110 million tons moved last year. With the 30 per cent gain, the total volume carried during 1948 would be approximately 143 million tons, largest tonnage ever handled on the nation's rivers.

"Continued rail increases," Mr. Thompson added, "just automatically make shippers, especially of bulk commodities such as steel, coal, oil, sulphur, automobiles and the like, seek less expensive means of transport . . .

"Our association office and our carrier members everywhere are receiving endless inquiries about shipping, often from companies who have never used any but rail transport before . . . "

OIL BARGES TRANSPORT NEW AUTOMOBILES—Barges which previously transported petroleum products northward up the Ohio river and returned empty to the Southwest, have been equipped to handle automobiles and trucks on their decks on their former "deadhead" run southbound. Pictured above is the towboat "Sohio Southern" with 15 barges and 359 new automobiles, clearing the government lock at Louisville, Ky.

and on brief but not in exceptions to the examiners' report) opposed higher allowances "mainly on the ground that they would derive no material benefit."

In its subsequent discussion of the necessity for uniform allowances, the commission said that advantage possessed by some harbor lines in longer hauls than those of the Jersey Central was not a "governing factor." The report added: "Under the provisions of section 15 (6) of the act allowances, as divisions of joint rates, are affected with a public interest, and our powers over divisions include avoidance of undue prejudice to some carriers, resulting from the strategic advantage of others, and of the consequent impairment of transportation facilities upon which a substantial number of shippers is dependent."

Much of the evidence reviewed in the commission's report consisted of the Jersey Central cost studies and criticisms of them by the defendant roads. Taking the "infirmities and uncertainties" of these studies into consideration, the commission found "warranted" a general conclusion that "reasonable average allowances" would be the 6 cents and 11 cents per 100 lb. which it prescribed for floatage and lighterage, respectively. In prescribing lighterage allowances lower than the basic 11 cents when line-haul rates were less than 26 cents, the commission undertook to provide for situations wherein the 11-cent allowance would leave "obviously inadequate" divisions for connecting lines.

Four Commissioners Dissent in Part

In his dissenting-in-part expression, to which Commissioners Splawn, Rogers and Mitchell subscribed, Commissioner Aitchison agreed with the majority's refusal to order a retroactive adjustment for the Jersey Central; but he said that the higher allowances were prescribed "without sufficient consideration of whether what remains of the joint rate in each instance will leave a just, reasonable, or equitable amount for the other line-haul carriers, parties to the joint rate movement."

"The harbor allowances," Mr. Aitchison continued, "were never intended to cover the cost of harbor services, or to have any relation to such costs. They were the result of bargaining and contract between the harbor lines and other carriers parties to the joint rates. The Jersey Central is dissatisfied with the provisions of the contract. Other carriers are satisfied with the arrangement as it stands. A revision, such as sought by the Jersey Central and which the report in substance requires, should be made only when it is shown to us that the resulting divisions to the line-haul carriers, particularly the non-harbor carriers, will be just, reasonable, and equitable. I do not think the complainant has borne the burden of establishing that its proposal, now substantially approved, will have this result."

As to that phase of the proceeding, the majority report had said this: "The Jersey Central is entitled to reasonable compensation for its harbor service, as part of the total service performed by all of the carriers under the joint rate, the amount of the allowance to be reasonably related to the portion of the rate left for distribution among the line-haul carriers. We have accepted, as reliable, the data from which complainant computes the cost of the Jersey Central's harbor service. If the harbor allowance to that carrier, based on a correct use of those data, is reasonable, and is deducted from a joint rate that is reasonable, the remainder of the joint rate must be viewed as reasonable. There is no showing, or contention, upon this record that the joint rates, in effect at the time of the hearing herein, were not reasonably compensatory. Some of them were prescribed by us. All of them have been substantially increased since the hearing."

"No Punches Pulled" at N. E. Shippers Board Forum

Subsidies a "weakening factor" for any industry, says Whittemore

A session exceptional in the history of Shippers Advisory Boards was held at Poland Spring, Me., on October 22 when officers of New England railroads and some 300 shippers conducted an open forum in which "no punches should be pulled."

The forum, arranged by William H. Day, traffic manager of the Boston, Mass., Chamber of Commerce and general chairman of the New England Shippers Advisory Board, was, as he said in opening it, "one at which either railroad men or shippers should say just what they please."

Mr. Day told the gathering, at what was the final session of a three-day meeting of the New England board, that "if we are to whip, as we must, the growing threat of socialization of our country's principal transportation system, and keep the railroads where they must remain—under private ownership—there must be an even better understanding than there is today between railroad executives and shippers and receivers of freight."

Railroad executives participating in the forum were F. H. Daggett, general manager, Bangor & Aroostook; F. A. Dawson, vice-president, operating, New York Central System; J. W. Smith, vice-president, operating, Boston & Maine—Maine Central; J. A. Rogers, general manager, Central Vermont; E. C. Nickerson, vice-president, traffic, New York, New Haven & Hartford; and W. E. Navin, trustee, Rutland.

Roads Invite Constructive Criticism

Each was given five minutes to address the shippers. Mr. Smith, the initial speaker, sounded the keynote when he said, "I know of no other industry which has its employees so scattered . . . . Railroad officers work day and night and Sundays, too, making a continued effort to police the vast network of rail lines, checking schedules and performances and working with shippers to try and make them satisfactory to both.

"We welcome and want your complaints and criticisms. But, too often, we don't get the complaints and criticisms at headquarters. . . . You can help us by seeing to it that, if you have a

complaint or a constructive suggestion, it reaches the headquarters of the railroad. You may be sure we shall study each such complaint or criticism that reaches us."

The other officers voiced similar thoughts, and also dwelt especially on freight claims and the major efforts railroads are making to reduce them. Then Mr. Day called on shippers to "let the bars down and have an exchange of questions and views that will bar no holds."

First came a question as to whether "the rumor that New England lines are planning to eliminate pick-up and delivery service is true?"

Mr. Nickerson, answering for all lines represented, said "We have abandoned this service at some smaller stations but you may be sure that if anything is done at other stations we shall sit down and discuss it with the interested parties before we take any further action. This elimination of some pick-up and delivery service has been going on since 1936 and you need have no fear that anything will be done without due notice to shippers and the public."

"Tonnage Leaving the Railroads"

J. B. Griffin, of the Scoville Manufacturing Company, Waterbury, Conn., said he is "greatly alarmed at the rate at which tonnage is leaving the railroads." "Some action must be taken right now to do something about it," he continued. "I ask you whether the railroads are getting close enough to the shippers to really understand their problems. I am really alarmed at the way shipper after shipper tells me of taking tonnage from the railroads and giving it to some other form of transportation. It is a bad situation. On this pick-up and delivery shippers would rather pay a cost-plus charge and keep the service. For it only means loss of more traffic for the railroads and with it will go other kinds of traffic."

Wage-Rate Increases "Can't Continue"

A. H. Ferguson, of the Providence, R. I., Chamber of Commerce, told the forum that "our greatest fear should be, and is, the threat of government ownership. We can't continue this vicious circle of constant wage increases to railroad employees followed by increased charges for carriage of freight. There must be an end to this sometime and that time is not distant. Something must be done about it now—and what are you railroad men doing?"

Mr. Smith replied that the roads are striving in every way to keep operating expenses down "and thereby keep our rates down as far as it is possible. We have three major problems—loss and damage, service, and costs of providing the service, and we are striving in every way we know how to solve all three."

Another shipper said "present freight rates are already driving shippers to other forms of transportation. We know this is but temporary relief, but we must take advantage of it, for we can't afford to lose any more customers. We know we've got to keep the railroads solvent in peacetime for we must not have the threat of a weakened railroad system in wartime; but, frankly, I believe the railroads collectively have not done as much as they could to help keep their rates down, their service up, and their employees performing the work they should be doing."

Mr. Day, in closing the forum, said, "We are certainly going to work, right now, to see what can be done to get shippers and railroad men together on common ground to combat the threat of nationalization of the railroad industry.

"Socialization of the railroad industry would most certainly be followed by nationalization of other large industries. This would be a calamity—just as much of a calamity as a weakened railroad situation would be for everyone in this country if war came."

Whittemore Addresses Meeting

Laurence F. Whittemore,, in his "first appearance" as president of the New Haven, was the principal speaker at the board's dinner meeting on October 21. "A free industrial economy, privately owned and managed, can be maintained only in conjunction with a free railroad economy, privately owned and managed," Mr. Whittemore said. "The private enterprise system can only continue to the extent that fundamental parts of it maintain the ability to support themselves without government subsidy."

"We widely hear and read of the danger of 'pricing ourselves out of a market' as railroads propose further increased rates to meet the inflated cost structure," he continued. "I do not believe that even with the new freight rate increases made necessary by increased wages and other costs, the cost of rail transportation will have advanced percentagewise as much as the general pattern of price increase for manufactured goods. Rather than the issue being one of 'pricing ourselves out of a market,' the issue is whether industrial management will be farsighted enough to pay a sufficient price for rail transportation to enable railroads to finance improvements necessary to insure continuance in private ownership, and to avoid socialized transportation. Socialized transportation is inevitably the forerunner of socialized industry. . . .

"We in charge of New England railroads must concern ourselves with problems of industry, and you, in turn, must render more than lip service to the solution of our problems; not only as transportation agencies, but as taxpayers, and in matters of regulation and unfairly subsidized competition. If, through inattention, private industry in the United States allows a paternalistic government to spend its tax money to render the railroads weak through strong subsidy to competition, it will have paid a high price for shortsightedness.

"America has had the best in rail transportation. It can continue to have the best only if such transportation is protected from unsound policies and supported so that a return on capital can be realized in some measure commensurate with the return which industrial enterprise enjoys and must enjoy. . . . New England railroads are ready to give you the best in transportation. . . . To do so, however, means more freedom in curtailing unprofitable practices, more general ability to turn gross income into net income—net income being of prime necessity to attract the required private capital to lead the advance in the art of railroading which

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" . . . TO CHANGE THE ECONOMY OF THE COUNTRY."

"The proponents of exclusive f. o. b. pricing are largely economists. They . . . would eliminate all cross-hauling of goods. Cross hauling may be a waste. It appears that it should be eliminated if doing so does not deprive us of mass production economies and competition in all markets. Of course, this would mean less traffic for the railroads and the need for a less extensive transportation system. In this connection, it has been pointed out to me that our vast system of railroads was a vital factor in helping to win the war. We cannot afford to jeopardize our railroad systems. They are vital to our national defense. It may be that if less goods are shipped it will result in higher transportation charges for products that continue to be shipped.

" . . . countless billions of dollars have been invested in business enterprises by our people in the belief that delivered prices and freight absorption were neither an economic nor a legal wrong. Unknown billions of dollars are invested in railroads, factories and other facilities which will have their usefulness and value seriously impaired under an economy which requires f. o. b. mill pricing.

"The present activities of the Federal Trade Commission have been conducted under statutes aimed at eliminating price discriminations and unfair methods of competition. It is the price discrimination statute under which the commission's theory of mill net price has largely resulted in the requirement of f. o. b. mill pricing in many industries. That statute was passed to do away with the big discounts which were given to chain stores. It does not appear that the Congress intended in passing that statute to change the economy of the country."

. . . From remarks by Senator Homer E. Capehart, chairman of the Senate trade policies committee, before the Chicago Association of Commerce and Industry on October 21.

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offers such large promise for the future.

"There are indications that any industry which depends upon governmental subsidy for its advancement comes to a point of devitalization which makes more and more subsidy necessary for its continuance. . . . It is my firm belief that the dependence of commercial aviation on various types of public subsidies, to an extent greater than any other transportation industry has ever enjoyed, is the primary cause of the present financial slump in which the air lines find themselves. Those which are doing the best job and are most nearly solvent are those which have had the least subsidy. In general those which have enjoyed the most subsidy are in the poorest condition. Such is the end result of every economy and every instrumentality developed by artificial means on other than sound and economic principles.

Subsidies Lead to Nationalization

"The fact that unsubsidized railroad transportation is in a healthier condition than subsidized air transportation must indicate that dependence on subsidy is in the long run a weakening factor in any type of business. It may well be that we shall witness the transformation of the now privately owned and operated common carrier air industry into the first socialized and nationalized industry since the government took over the postal system. This situation results from a public policy of subsidy approaching the point of complete dependence. The theory of development of an infant industry with national defense potentialities has been carried too far for the good of the public, the industry, or, in my opinion, the national defense.

"So, too, with the highway carriers. A policy of free use of roads and a natural grasping at opportunity by a trucking industry understandably interested in profits has come to a point that few, if any, communities or government agencies can afford to maintain and construct a highway system adequate to meet the ever growing demands. The remedy, of course, is to charge the users full costs. If that is done, we can look forward to a new equilibrium in competitive transportation economics. The same can be said with greater emphasis so far as interior waterways are concerned.

"I am alarmed to note that as railway rates are raised to meet increased costs, the response of too many shippers is to have immediate recourse to alternate forms of transportation, costs of which are cushioned by indirect taxpayer contributions. Certainly a pattern of cooperation should include economic foresight as to the implications of these traffic shifts. The implications are, of course, to discern what industry comes second and what industries come third and fourth on the list of nationalized industries programs. This list has already been drawn up in England, and it can be drawn up in this country."

INTERIM REPORT ON A "CHALLENGING OPPORTUNITY"

The New York Railroad Club's first meeting of the fall season on October 21 had as its speaker David E. Smucker, general manager of the Long Island. His subject was "Change at Jamaica." His exposition of it left a large and interested audience in no doubt that there has been in recent months—and still is in process—a "change," not only at the Long Island's headquarters at Jamaica, but also all along the line, and indeed in the attitudes and anticipations of a very large part of the road's hundreds of thousands of customers.

This change has come about, Mr. Smucker explained, through the expenditure, accomplished and programed, of well over $18 million, and through a vigorous and sustained endeavor to develop and cultivate favorable public opinion. If its customers feel more kindly toward the Long Island than they did—and the speaker recited his reasons for being certain that they do—it is not just because they have been told by advertisements and letters and radio and speakers at firehouses and schools and outdoor gatherings that the railroad means well, and intends to do its job better. It has done a better job, he declared. Substations have been built to augment the power supply on the electrified lines, and the results are a better on-time performance and better heating and lighting. Stations are being improved, new cars are being built, cars in service are being renovated to eliminate conditions annoying to passengers, and customers' suggestions are being heard and considered and, so far as is practicable, adopted.

Mr. Smucker did not dwell upon freight operations because the Long Island's difficulties have been in the passenger, and particularly the commutation, service. Commuting is never much fun, except perhaps for the pinochle players, he said, but it goes with living in the suburbs, which people are electing to do in ever-increasing numbers. The Long Island continues to lose money in its operations, and Mr. Smucker did not suggest that early payment of dividends to stockholders is likely. But its customers think less harshly about the road than they did, the morale of its employes has improved substantially (chiefly because they no longer are targets for all the complaints), and its physical performance is better, he pointed out. These results would not have been possible without capital expenditures, but they would not have been so promptly and completely realized without the intensive application of public relations principles which the speaker summarized in homespun but explicit terms.

When Mr. Smucker came to Jamaica everybody was "down on" the Long Island. This state of affairs he regarded as a "challenging opportunity," he explained, and he made it clear that it has been and is the Long Island management's intention to make the most of that opportunity.

LEADING THE LONG ISLAND IN ITS NEW ROLE—Mr. Smucker paved the way for his talk to the New York Railroad Club by categorizing as excessively juvenile the photograph used in announcing the meeting, so *Railway Age* asked for, and he generously provided, this likeness.

The board unanimously adopted a resolution proposed by Arthur P. Little, traffic manager of the Dennison Company, urging repeal of the present tax on freight and passenger transportation.

Arthur H. Gass, chairman of the Car Service Division, Association of American Railroads, told board members that the freight-car situation is still "not good" and stressed "the absolute necessity of improving performance with cars which are available." E. P. Miller, district manager of the Car Service Division, reported that New England railroads are proceeding rapidly toward even more complete Dieselization of their motive power; and Frank J. Gill, traffic manager of the Oxford Paper Company, and board secretary, predicted a two per cent increase in car loadings during the fourth quarter of 1948.

Fact Finders Begin Hearings At Chicago in Non-Op Wage Dispute

A three-man fact-finding board appointed by President Truman was told this week that the solvency of the nation's railroad system is at stake in the $1,500,000,000 wage-and-hour demands of 16 non-operating unions representing a million workers. In the opening statement of the carriers, given as hearings into the dispute got underway at Chicago on October 26, Guy W. Knight, counsel for the carriers' wage committees, also labeled the brotherhoods' demands as "unequalled and unrivaled" in the history of the Railway Labor Act.

As noted in the *Railway Age* of October 23, page 58, the emergency board was created in an executive order issued by President Truman on October 18. Members of the panel are: Chairman,

Dr. William M. Leiserson, Washington, D. C., former chairman of the National Labor Relations Board and the National Mediation Board; David L. Cole, Paterson, N. J., attorney and former chairman of the New Jersey Mediation Board; and George A. Cook, Sarasota, Fla., former member of the National Mediation Board.

Under provisions of the Railway Labor Act, the emergency board has 30 days in which to hold hearings and to make a report to the president. This period may, with the consent of both parties, be extended. An additional 30-day "cooling off" period must elapse before a strike can be called.

The board will conduct the hearings six days a week, from 9 a. m. to 1:30 p. m. The first day's session was devoted entirely to the presentation of opening statements by both parties. The text of the carriers' statement consisted of 53 pages. Lester Schoene, attorney for the brotherhoods, delivered the union's opening statement, which required 1½-hr.

Mr. Knight told the board that the non-operating employees actually "seek a wage increase in excess of 48 cents an hour through three devices: (1) 48 hours pay for 40 hours work, equal to an increase of 20 per cent—or about 23 cents an hour; (2) time and one-half, with a minimum of 12 hours pay for any hour worked on Saturdays, and double time, with a minimum of 16 hours pay for any hour worked on Sundays and holidays; and (3) a further wage increase of 25 cents an hour."

The carriers' counsel further asserted: "No such wage increase can be justified on the basis of the cost of living, on productivity, or budgets, or by comparison with wages in outside industry or any other basis. The demand for a reduced work week is not one for a 40-hr. week, but for a rigid Monday-to-Friday work week, with penalty pay for other days. This demand is made upon an industry which cannot possibly avoid a great amount of work on Saturdays, Sundays and holidays."

Mr. Knight directed the attention of the board to the already critical car supply and observed that it would become even more critical if the carriers were compelled to restrict operations to five days a week. He said such a situation would result in less desirable and less efficient service and that the railroads would thereby subject themselves to greater competition from other forms of transportation.

The carriers, said Mr. Knight, do not contend that the employees are not entitled to any increase in wages, but do maintain that they are not entitled to more than a part of what they are demanding. Pointing to the recent 10-cent-an-hour wage boost granted conductors and trainmen (see *Railway Age* of October 9, page 73), he stated: "These unions are not in the habit of accepting less than what they are satisfied their men are entitled to. This wage increase furnishes the maximum limits of any increase in wages for any purpose to which the employees are entitled."

Prior to the opening of the fact-finding hearings, G. E. Leighty, chairman of the employees' conference committee, announced that the strike vote among the non-operating unions is averaging about 95 per cent in favor of a walkout. However, the brotherhoods are "hopeful that this dispute can be settled without the necessity of calling a strike," he stated.

Mr. Leighty accused the railroads of printing "misleading" advertisements in the newspapers in a "bare-faced attempt to build up public sentiment against the railroad workers even before the emergency board begins its hearings." He said non-operating employees, as of December, 1947, averaged $56.45 for a 48-hr. straight time work week, while industrial workers putting in 40 hours per week averaged from $59.48 to $75.22 per week.

RATES AND FARES STILL LOW —SO IS NET RETURN

That present-day freight and passenger rates are still relatively low, despite recent increases, was stressed by Robert M. Edgar, assistant to the president of the Boston & Maine, in a recent address at Malden, Mass.

"That the price of railroad transportation has remained relatively low," Mr. Edgar said, "is something which has been overlooked by most people. Because railroad rates and fares are subject to regulation by public authority and because of the long drawn out hearings and the publicity that attends a petition for increased rates, an impression is created that these rates have gone up more often and faster than they actually have. The average revenue per ton-mile for the nation as a whole was 1.076c in 1947, and 1.275c in 1921. The energies which once were devoted to building and expansion today must be devoted to meeting competition from the automobile, the bus, and the truck, operated over magnificent publicly owned highway systems, and to the increasingly serious battle with rising costs. "Despite record-breaking volumes of traffic and gross revenues, net return on investment continues dangerously low. . . . What this means is that the credit of the industry is poor, and when this situation exists it is impossible to sell stock to finance improvements. . . . An adequate rate of return must be allowed if we are to have the strong rail systems that this country needs to support it in peace and defend it in war."

O.K.'s Unloading Charges on Fruits And Vegetables at N. Y. and Phila.

Charges proposed by New York and Philadelphia railroads for unloading carload shipments of fresh fruits and vegetables in those cities have been found just and reasonable by the Interstate Commerce Commission. The report was in I. & S. Docket No. 5500, and the accompanying order vacated as of November 1 tariffs suspended by the commission when they were originally filed with a June 1, 1947, effective date.

The approved charges are $1.50 per ton for unloading citrus fruits or fresh or green vegetables (not cold pack or frozen); $1.75 per ton on fresh fruits, other than citrus; and $2 per ton on melons (including cantaloupes) and fresh or green vegetables (not cold pack or frozen) when top icing or body icing is used.

The commission's report noted that the establishment of the charges is in accord with the practice, begun by the carriers in 1924, of gradually eliminating so-called free unloading of carload freight. "It does not appear," the report said, "that there are points other than New York and Philadelphia that are exceptions to the general rule that the obligation of unloading carload freight rests with the shippers." And while the present charges will apply only on fruits and vegetables, "it was indicated," as the commission put it,

RIGHT RAILROAD—WRONG YARD

As a result of an unfortunate error, the article in *Railway Age* of October 23, page 32, describing the rebuilt yards of the Baltimore & Ohio at Willard, Ohio., included an illustration of a yard control tower which is not a part of the Willard facilities. It

is, however, a B. & O. structure, as it is an essential part of that road's modernized Cone yard at East St. Louis, Ill. An illustration showing the tower appeared in *Railway Age* of April 17, page 48, as a part of a description of the Cone yard.

One hundred new heavy duty gondola cars, the first of an order for 2,000 (See *Railway Age* of March 27, page 69), are rolling out of the Pennsylvania's Altoona, Pa., shops this month for immediate service in transporting steel products and large shipments of many kinds. Some of the cars in the order, which will go into service after October at the rate of 250 a month, are shown above. Two hundred of the cars will be equipped with nailable steel flooring, developed by the Great Lakes Steel Corporation. The P.R.R. recently announced plans to build 2,000 more freight cars at Altoona in 1949

that "consideration is being given" to the establishment of unloading charges on other traffic at New York and Philadelphia, "but no definite conclusion had been reached."

Protests against the charges were made by the Secretary of Agriculture, Port of New York Authority, Florida Railroad and Utilities Commission, State Corporation Commission of Virginia, North Carolina Utilities Commission, Public Service Commission of South Carolina, and various organizations representing fruit and vegetable shippers. The contentions of these protestants were rejected by the commission.

"Respondents," it said, "have justified their proposals. In reaching this conclusion we have given due consideration to all pertinent facts of record, particularly the evidence with respect to the cost of the service. Admittedly, respondents have derived substantial benefits from the concentration of traffic at their New York and Philadelphia produce terminals and from the line-haul revenue received by them from this traffic, but these factors are in no sense controlling in the determination of the issues now before us.

"The protesting shippers have also received worthwhile benefits. The present expense of unloading is such that respondents should no longer be required to furnish this service without adequate compensation. The cost of service is less at Philadelphia than at New York, but no separate charge for special sorting and stacking is made at that point. Furthermore, the record indicates the desirability of a parity of charges for unloading at New York and Philadelphia."

The report noted that Chairman Lee and Commissioners Aitchison, Splawn and Alldredge dissented. Also, that Commissioner Johnson, who is director of the Office of Defense Transportation, participated, although his vote was not necessary to break a tie. Without it, the majority report would have been a 5-to-4 instead of a 6-to-4 decision. Another notation said that Commissioner Patterson, "being necessarily absent," did not participate.

New Budd Department To Make Disk Brakes

The Budd Company this week announced the organization of a new department to manufacture the firm's railroad disk brake at its Red Lion plant, Philadelphia, Pa. The new department, an expansion of the pioneer organization which has manufactured the disk brakes since they first were made available to the railroads in 1938, is scheduled to begin quantity production about January 1.

1948 Second-Quarter Loading Estimates 2.8 Per Cent High

The 13 Shippers Advisory Boards overestimated car loadings for the second quarter of 1948 by 2.8 per cent, according to the latest comparison of forecasts with actual loadings issued by A. H. Gass, chairman of the Car Service Division, Association of American Railroads. The variations by individual boards ranged from an overestimate of 19 per cent to an underestimate of 10 per cent, while variations by commodities ranged from an overestimate of 25.9 per cent in the case of frozen foods, fruits and vegetables to an underestimate of 22.2 per cent on cotton.

The report shows that there were overestimates in 26 commodity groups and underestimates in six. In addition to frozen foods, fruits and vegetables, there were overestimates of 17 per cent in poultry and dairy products; 16.1 per cent in salt; 13.1 per cent in fresh fruits, other than citrus; 12.1 per cent in fresh vegetables, other than potatoes; 12 per cent in sugar, syrup and molasses; and 11.4 per cent in machinery and boilers. Among the larger underestimates were 11.7 per cent in chemicals and explosives and 10.5 per cent in cement.

COMPARISON NATIONAL FORECAST WITH ACTUAL CAR LOADINGS — SECOND QUARTER, 1948

Board	Car loadings, Second Quarter, 1948 Estimated	Actual	Percentage of Accuracy Over Est.	Under Est.
Central Western	245,575	243,643	0.8	
Pacific Coast	426,364	371,362	12.9	
Pacific Northwt.	257,979	209,081	19.0	
Great Lakes	693,222	630,239	9.1	
Ohio Valley	1,074,528	1,048,682	2.4	
Mid-West	994,148	964,320	3.0	
Northwest	729,215	717,450	1.6	
Trans-Mo-Kansas	383,147	400,257		4.5
Southeast	1,017,553	1,025,385		0.8
Southwest	557,347	613,175		10.0
New England	152,573	143,735	5.8	
Atlantic States	902,444	918,319		1.8
Allegheny	1,214,326	1,120,910	7.7	
Total	8,648,421	8,406,558	2.8	

Census of Transportation

The Department of Commerce has announced that the Census of Transportation covering the year 1948 will not be taken. The department said that although the 80th Congress passed a law providing for such a census, funds to carry it out were not approved. Under such circumstances, it said, the comptroller general has decided to eliminate the poll.

A comprehensive national Census of Transportation, the department said, has never before been taken. It added, however, that legislation passed by Congress provides that such a census will be taken in 1954 to cover 1953.

Freight Car Loadings

Loadings of revenue freight in the week ended October 23 totaled 927,532 cars, the Association of American Railroads announced on October 28. This was an increase of 13,700 cars, or 1.5 per cent, above the preceding week, a decline of 27,095 cars, or 2.8 per cent, under the corresponding week last year, and a decrease of 14,725 cars, or 1.6 per cent, under the equivalent 1946 week.

Loadings of revenue freight for the week ended October 16 totaled 913,832 cars, and the summary for that week

as compiled by the Car Service Division, A.A.R., follows:

Revenue Freight Car Loadings
For the week ended Saturday, October 16

District	1948	1947	1946
Eastern	159,141	167,162	170,148
Allegheny	186,803	197,479	192,797
Pocahontas	70,376	75,710	71,318
Southern	138,057	139,722	140,328
Northwestern	141,512	149,780	147,712
Cent. Western	146,021	152,138	146,513
Southwestern	71,922	72,158	62,950
Total Western Districts	359,455	374,076	357,175
Tot. All Roads	913,832	954,149	931,766
Commodities:			
Grain and Grain Products	51,710	55,826	50,237
Livestock	19,913	22,665	33,518
Coal	177,990	191,711	191,019
Coke	14,922	14,884	14,690
Forest Products	48,308	45,611	48,503
Ore	68,604	68,430	62,839
Merch'ise l.c.l.	111,497	122,413	129,984
Miscellaneous	420,888	432,609	400,976
October 16	913,832	954,149	931,766
October 9	891,811	956,862	899,443
October 2	908,581	942,455	907,168
September 25	907,971	937,954	916,515
September 18	909,733	931,072	899,052
Cumulative total 41 weeks	34,727,952	35,959,138	33,156,749

In Canada.—Carloadings for the week ended October 16 totaled 84,000 cars, as compared with 91,293 cars for the previous week, and 78,317 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
October 16, 1948	84,000	36,821
October 18, 1947	78,317	37,968
Cumulative totals for Canada:		
October 16, 1948	3,254,582	1,545,679
October 18, 1947	3,135,701	1,537,608

Three Irregular Air Carriers Denied "Coach Service" Rights

The Civil Aeronautics Board has denied petitions of Standard Air Lines, Viking Airlines and Airline Transport Carriers for extension of their exemption authority as irregular air carriers to permit so-called scheduled "coach service." The airlines sought permission to operate scheduled passenger transportation without the "luxury" services—such as free meals aloft, baggage handling and downtown check of passengers—at lower rates than the present rates of scheduled airlines, and without benefit of mail pay or other governmental aid.

The board's denial of permission to operate this service under an exemption order, rather than under a certificate, should not, the board said, be construed as a denial of the need for this coach-type service, but means only that the public need or lack of need for such a service can be more properly developed and obtained through "regular procedure" and public hearing under those provisions of the Civil Aeronautics Act which provide for the granting of certificates.

Additional General News appears on pages 112, 113, and 114.

ORGANIZATIONS

The annual dinner and dance of the **Rochester Transportation Club** will be held at the Brook-Lea Country Club, Rochester, N. Y., on November 6.

George Ferguson, editor of the Montreal Daily Star, will be guest speaker when the **Canadian Railway Club** meets at the Mount Royal Hotel, Montreal, Que., on November 9 at 8 p.m.

The next meeting of the **Car Foremen's Association of Chicago** will be held on November 8, at 8:00 p.m., in the Lincoln room of the Hotel LaSalle, Chicago. Mr. B. J. Huff, assistant master car builder, Chicago & Eastern Illinois, will address the meeting on the subject "Light Repair Track Layout, Equipment and Operation."

SUPPLY TRADE

The **Baldwin Locomotive Works** has announced the appointments of **E. R. Wisner** as assistant to the vice-president in charge of sales, Eddystone division, and **Walker H. Evans** as district manager of the Philadelphia, Pa., district, to succeed Mr. Wisner. Mr. Evans joined Baldwin in 1916 and worked in the

Walker H. Evans

shops and as erecting engineer in France until 1920, when he was assigned to the Chicago office. In 1932 he was appointed Philadelphia district manager for the standard steel works division and later worked as transportation salesman in the Philadelphia office, the position he held at the time of his recent appointment.

William H. Hart, who formerly represented the railroad and industrial divisions of the **Buda Company** in its Minneapolis-St. Paul territory, has been appointed district manager of the firm's railroad division, with headquarters in Chicago. Mr. Hart was born on June 18, 1919, at Battle Creek, Mich. He was graduated from Purdue University in 1940 with a bachelor of science degree in mechanical engineering, immediately after which he joined the Buda sales department at Harvey, Ill. In 1941 he was transferred to New York

William A. Hart

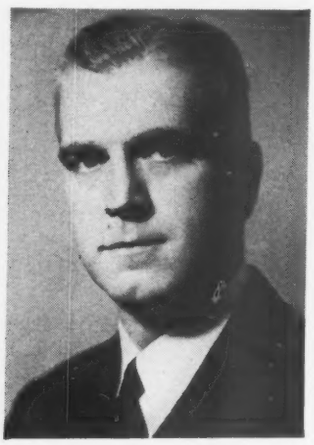
to represent the railroad division in export and industrial sales through distributors, and early in 1942 he joined the United States Army Air Forces. Mr. Hart rejoined Buda in November, 1945, and represented the industrial division in northeastern territory, with headquarters at New York. In September, 1946, he was appointed to represent the railroad and industrial divisions in the Minneapolis-St. Paul territory.

The **American Car & Foundry Co.** has announced the appointments of **R. M. Hoel** and **T. C. Ballou** as sales agents representing the company in the north

R. M. Hoel

eastern railroad area, with headquarters at New York. Mr. Hoel has been a member of the sales department since 1946 and, just before his recent appointment, was located in the Pittsburgh, Pa., office. Mr. Ballou joined

American Car & Foundry in 1936 and since that time has specialized in welded products and tank cars. From 1942 to



T. C. Ballou

1946 he served as a lieutenant in the United States Navy.

The **Aro Equipment Corporation,** Bryan, Ohio, has announced the appointment of **Ralph W. Morrison** as general sales manager of the firm. Mr. Morrison joined the Aro organization in 1940 as Detroit division manager. In 1941 he was appointed assistant sales manager of the Air Tool division and later

Ralph W. Morrison

was advanced to sales manager of the division. The company also has announced the appointments of **E. W. Iman** as sales manager of the lubricating equipment division; **E. L. Jackson,** as sales manager of the industrial tool division; **M. J. Anderson,** as manager of the fittings division; and **G. S. King,** as advertising manager.

E. M. Hendrickson, chief engineer of the **Paxton-Mitchell Company** and its subsidiary, **Paxton-Diesel Engineering Company,** for the past three years, has been appointed sales manager, succeeding **George T. Badger,** resigned. Mr. Hendrickson was graduated from Kansas State College, after which he worked in the engineering department of the Union Pacific for four years. He later worked in the engineering department of the Chicago & North Western for a year and a half, leaving that road to join the engineering staff of the T. Z. Railway Equipment Company. Mr.

E. M. Hendrickson

Hendrickson joined Paxton-Mitchell in 1935 as a sales engineer, serving the Chicago territory until September, 1945, when he was promoted to chief engineer, with headquarters in Omaha, Neb.

John H. Batten, formerly executive vice-president of the **Twin Disc Clutch Company,** has been elected president. **P. H. Batten,** founder of the company, who previously held the positions of president and chairman of the board, will maintain active interest in company affairs as chairman of the board of directors. Mr. John Batten joined the company in 1935 after graduating from Yale University with a degree in busi-

John H. Batten

ness administration and worked in various departments in the shops and the general office. In 1937 he was appointed a member of the board of directors and has continued to serve on the board since that date. He was appointed assistant general manager in 1940 and, in 1942, assumed additional duties as assistant treasurer. Mr. Batten was appointed vice-president and assistant general manager in 1943 and executive vice-president in 1945.

OBITUARY

Godfrey Gort, president of the Western Railway Supply Company at Chicago since 1932, died at Passavant Memorial hospital in that city on October 24.

Hugh E. Creer, who retired several years ago as vice-president of the Camel Sales Company, with headquarters at Chicago, died at his home in Mountain Grove, Mo., on October 12.

William M. Olsen, western district sales manager, Chicago division, of the Lamson & Sessions Company, died on October 5.

EQUIPMENT AND SUPPLIES

PASSENGER CARS

G. N. to Buy 66 New Passenger Cars Costing $8,500,000

Directors of the Great Northern on October 27 authorized the purchase of 30 sleeping cars, 6 coaches, 6 dining cars, 6 coffee shop cars, 6 observation cars, 6 baggage cars and 6 baggage-mail cars at an estimated cost of $8,500,000.

The acquisition of additional modern passenger equipment, said F. J. Gavin, president of the G. N., is encouraged by consistently high patronage of the new "Empire Builder," which went into service in February, 1947. Delivery of the new equipment is expected in 1951. The G. N. plans to replace cars on the present "Empire Builder" entirely with new equipment when it is delivered. Equipment now on the "Empire Builder" will be used to streamline the "Oriental Limited."

FREIGHT CARS

The **Baltimore & Ohio** is rebuilding 677 gondola cars. Work is being done at the road's DuBois, Pa., Glenwood, Willard, Ohio, and Chillicothe shops, which are turning out a total of 23 cars each work day.

The **Canadian Pacific** has ordered 500 50-ton steel-sheathed, wood-lined box cars from the National Steel Car Corporation.

SIGNALING

The **Chicago, Burlington & Quincy** has ordered an eight-lever Model 2 unit-lever electric interlocker from the Gen-

eral Railway Signal Company for expansion of the present electric interlocking facilities at Seminary street, Galesburg, Ill. These additional levers will control seven signals and five electric switch machines. Forced-drop electric locks, Type U transformers, Model 5C electric switch machines, and Type BT232 copper-oxide rectifiers are included in this order.

The **Chesapeake & Ohio** has placed orders with the Union Switch & Signal Co. for materials for expansion and complete modernization of the retarder-equipped westbound hump yard at Russell, Ky. The present yard of 26 tracks will be expanded to a yard of 52 tracks. This 52-track yard will be equipped with 1,510 rail-feet of electropneumatic Model-31 car retarders, 54 direct-acting switch movements with detector track circuits, 52 power-operated skate machines, six control machines, the necessary hump, trimmer, and repeater signals and associated apparatus. Installation work will be done by railway forces.

The **Boston & Maine** has awarded a contract to the Union Switch & Signal Co. covering installation of centralized traffic control between Johnsonville, N. Y., and Troy, 16.3 mi., involving M-22A electric switch machines, S-21 spring switch layouts, SL-8 electromechanical locks, coded detector track circuits, H-2 searchlight signals, relays, rectifiers, U-5 switch circuit controllers, etc. This territory is located west of an existing C.T.C. system between Hoosick Falls, N. Y., and Eagle Bridge, 4.2 mi., all of which will be controlled from Johnsonville tower.

The **Chesapeake & Ohio** has placed an order with the Union Switch & Signal Co. for Type TC table-lever units to be added to an existing 12-lever frame at "CS" Cabin, Stone Cliff, W. Va. These units are required for extensions at this interlocking, involving an added crossover and turnout, with materials necessary for locking changes in the enlarged machine.

The **Baltimore & Ohio** has ordered equipment from the General Railway Signal Company for installation of a radio train communication system at Grand Central Terminal, Chicago. This order comprises two transmitters and two receivers to operate on a frequency of 159.93 megacycles.

The **Missouri Pacific** has ordered materials from the General Railway Signal Company for installation of absolute permissive block signaling between McGehee, Ark. and Collinston, La., about 73 mi. Types D and G color-light signals, Type K relays, and welded steel relay cases will be used in this installation.

The **New York, New Haven & Hartford** has ordered equipment from the General Railway Signal Company for installation of radio communication on seven locomotives to be operated at Hartford, Conn. This system will have one wayside station and will operate on a frequency of 161.55 megacycles. An audible tone check system will be used.

IRON & STEEL

The **Pennsylvania** has placed orders for 145,600 net tons of rail, at a total cost of $9,100,000, with the Carnegie-Illinois Steel Corporation, the Bethlehem Steel Company and the Inland Steel Company. Of the total, 90,000 tons will be 155-lb. and 140-lb., and the remainder 133-lb. The new rail will be put into main-line track throughout the system to replace existing rail of lighter sections, which will be moved to locations where traffic is less dense.

COMMUNICATIONS

New York Central.—Major radio installations providing faster and more efficient operation will be made at nine more points on this road, John L. Niesse, general superintendent of communications, announced on October 27. Radio communication will be established in yard service at two points near Toledo, Ohio: Air Line Junction, west of the city, and Stanley yard, south of the city. The Mott Haven and 72nd street yards in New York, as well as facilities in Buffalo, N. Y., Rochester and Albany, will be equipped with radio for terminal and industrial switching service. The present service at DeWitt yard near Syracuse, N. Y., and at Gardenville yard near Buffalo, will be augmented.

CONSTRUCTION

Atchison, Topeka & Santa Fe.—This road has awarded a contract to C. E. Maxwell & Son, Columbus, Kan., for grading and bridge work in connection with a line change west of Turner, Kan.

Birmingham Southern.—This road has begun work on a new car repair shop, 56 ft. by 220 ft., at Ensley, Ala., which will be equipped for general overhauling of railroad cars. A contract for $35,349, covering fabrication and erection of the steel, has been awarded to the Virginia Bridge Company. The remainder of the work will be done either by company forces or private contractors. It is estimated that the total cost of the project will amount to $115,000, including crane and shop machinery.

Northern Pacific.—This road plans to begin construction soon on a service building for carmen at Spokane, Wash., and on a similar structure for shopmen at Parkwater, Wash. The combined cost will amount to $63,000. The contract for the work has been awarded to Hazen & Clark of Spokane. The structure at Spokane will be a 32-ft. by 66-ft. insulated metal fireproof building, with concrete floor and foundation. Of approximately the same dimensions, the building at Parkwater will be constructed of concrete blocks, with concrete floor and foundations and asbestos shingle roof.

Texas & Pacific.—This road has awarded a contract to Robert E. McKee, El Paso, Tex., for altering, repairing and improving the second floor of the passenger station at Big Spring, Tex., for use as division offices, at an estimated cost of $58,000. A contract for similar work on a two-story office building at Alexandria, La., has been awarded to R. J. Jones of that city, at an estimated cost of $35,000.

CAR SERVICE

I.C.C. Service Order No. 780 has been modified by Amendment No. 2, which set back the expiration date from October 15 until February 28, 1949. The order provides that 25 per cent of the carload minimum must be loaded in cars of lumber forwarded from Washington and Oregon points to be stopped to complete loading.

I.C.C. Service Order No. 781, which restricts the number of reconsignments on cars of hay, has been modified by Amendment No. 2, which set back the expiration date from October 15 until February 28, 1949.

Because of the shortage of box cars and the provisions of certain tariffs requiring that Christmas trees be shipped in box cars only, the Interstate Commerce Commission has issued Service Order No. 829, effective October 23 through January 10, 1949, so as to provide that any railroad may, at its option, furnish open top cars for the loading of such trees.

The Office of Defense Transportation has issued Amendment No. 1 to General Permit ODT 18A, Revised-24C, effective October 15, so as to include points in Idaho in the origin territory where apples packed in boxes may be loaded to a weight not less than 35,000 lb., and Gravenstein apples packed in baskets may be loaded to a weight not less than 30,000 lb.

The O.D.T. also has issued, effective October 20 through February 28, 1949, General Permit ODT 18A, Revised-43, which provides for carload shipments of tomatoes in boxes, standard lug, in minimum quantities of not less than 600 boxes, and General Permit ODT 18A, Revised-44, which provides for carload shipments of onions in minimum quantities of not less than 30,000 lb. Subsequently the O.D.T. issued Amendment No. 2, setting back the expiration date of the permit from November 15 to December 31.

Revised I.C.C. Service Order No.

775, which provides for super-demurrage charges on freight cars, has been modified by Amendment No. 6, effective November 1. The amendment cancels Amendment No. 2 which was issued last May to establish demurrage charges higher than those of the order's general scale on "cars described in the current Official Railway Equipment Register under headings, Class G—Gondola Car Type, Class H—Hopper Car Type, and Class LO—Special Car Type." The order's general scale is $3.30 per car per day, or fraction thereof, for the first two days after expiration of free time, and $5.50 per day, or fraction thereof, for each succeeding day. The Amendment-No.-2 charges on the cars involved had run up to $16.50 per day, or fraction thereof, after the fourth day.

The Office of Defense Transportation has issued Special Direction ODT 18 A-1, Amendment 13, effective November 1, which provides that carload shipments of rice, in any type of container, and straight or mixed carload shipments of pearled barley, dried beans, dried lentils and dried peas in packages shall be loaded to a weight of not less than 60,000 lb.

The O.D.T. also has issued General Permit ODT 18A, Revised-45, effective October 27 through February 28, 1949, which authorizes the loading of either straight carload shipments of Irish potatoes or mixed carloads of Irish potatoes and onions to a weight not less than 40,000 lb. when originating at points in California, Oregon, Washington, Idaho or Utah.

ABANDONMENTS

Chicago, Burlington & Quincy.—Adopting recommendations of a proposed report by Examiner J. K. Lyle (see *Railway Age* of June 12, page 71), Division 4 of the Interstate Commerce Commission has approved a plan under which this road will continue to operate over approximately 53 miles of the Chicago Great Western in order to handle traffic formerly moved over its own line between Des Moines, Ia., and Osceola. The approved operations are substantially the same as those which the Burlington has been conducting under the provisions of a commission service order issued in June, 1947, when flood waters rendered impassable that portion of its Des Moines-Osceola branch between Burch and New Virginia, approximately 42 miles. Some track damage also was sustained between New Virginia and Osceola, but that section was repaired and operation resumed as to freight service.

The commission has permitted the Burlington to abandon that portion of its branch between Burch (2.4 miles from Des Moines) and Truro, 32.1 miles, and to acquire rights (comparable to those included in the service order) over the C. G. W. between Burch and Talmage, 51 miles. The Burlington also operates under a trackage rights agreement over the C. G. W. between Des Moines and Burch. At the same time, the commission has approved as a permanent structure the 2,869-ft. connecting track which the Burlington, pursuant to the commission's service order, constructed between its own line and the C. G. W. at Talmage. In approving this phase of the application, the commission overruled a motion filed by the Iowa State Commerce Commission asking dismissal on the basis of contentions that the track was constructed contrary to the provisions of the Interstate Commerce Act.

The commission, meanwhile, refused to permit the Burlington to abandon that part of the same branch extending between Truro and New Virginia, about 10 miles. In this connection, the commission noted that more traffic is handled at Truro than at New Virginia, the point to which the applicant planned to continue service from Osceola, where a connection is made with its main line from Burlington to Council Bluffs. The public need for continued freight service is no less urgent at Truro than at New Virginia, the commission said, adding that the expenditure necessary to restore and maintain service to Truro will not be "unduly burdensome on a carrier as prosperous as the applicant."

The line of the C. G. W. over which the Burlington will operate is part of the main line of the former from Kansas City, Mo., to Minneapolis, Minn., via Des Moines. It crosses the Burlington's Council Bluffs-Burlington line at Talmage and between that point and Burch roughly parallels the Burlington's Osceola-Burch line.

Harriman & Northeastern.—Division 4 of the Interstate Commerce Commission has dismissed without prejudice this road's application for authority to abandon its line between DeArmond, Tenn., and Petros, 13 miles. (See *Railway Age* of September 11, page 85.)

Union Pacific—The Interstate Commerce Commission has postponed the effective date (40 days from September 13) of its certificate in the Finance Docket No. 15810 proceeding, wherein, as reported in *Railway Age* of October 16, page 86, it authorized this road to abandon its so-called Pleasanton branch, extending from a connection with its Loup City branch at Boleus, Nebr., to Pleasanton, approximately 22.1 miles. At the same time, the commission has extended from October 18 to October 25 the time within which any party to the proceeding may file a petition for reconsideration and further hearing. The commission's action was in response to a request from counsel for those interests opposing the abandonment, including shippers, the state of Nebraska and the Nebraska State Railway Commission.

FINANCIAL

Alabama Great Southern.—*New Director.*—DeSales Harrison, of Chattanooga, Tenn., president of the Coca-Cola Bottling Company, has been elected a director of this company, a Southern subsidiary. Mr. Harrison succeeds the late Z. C. Patten.

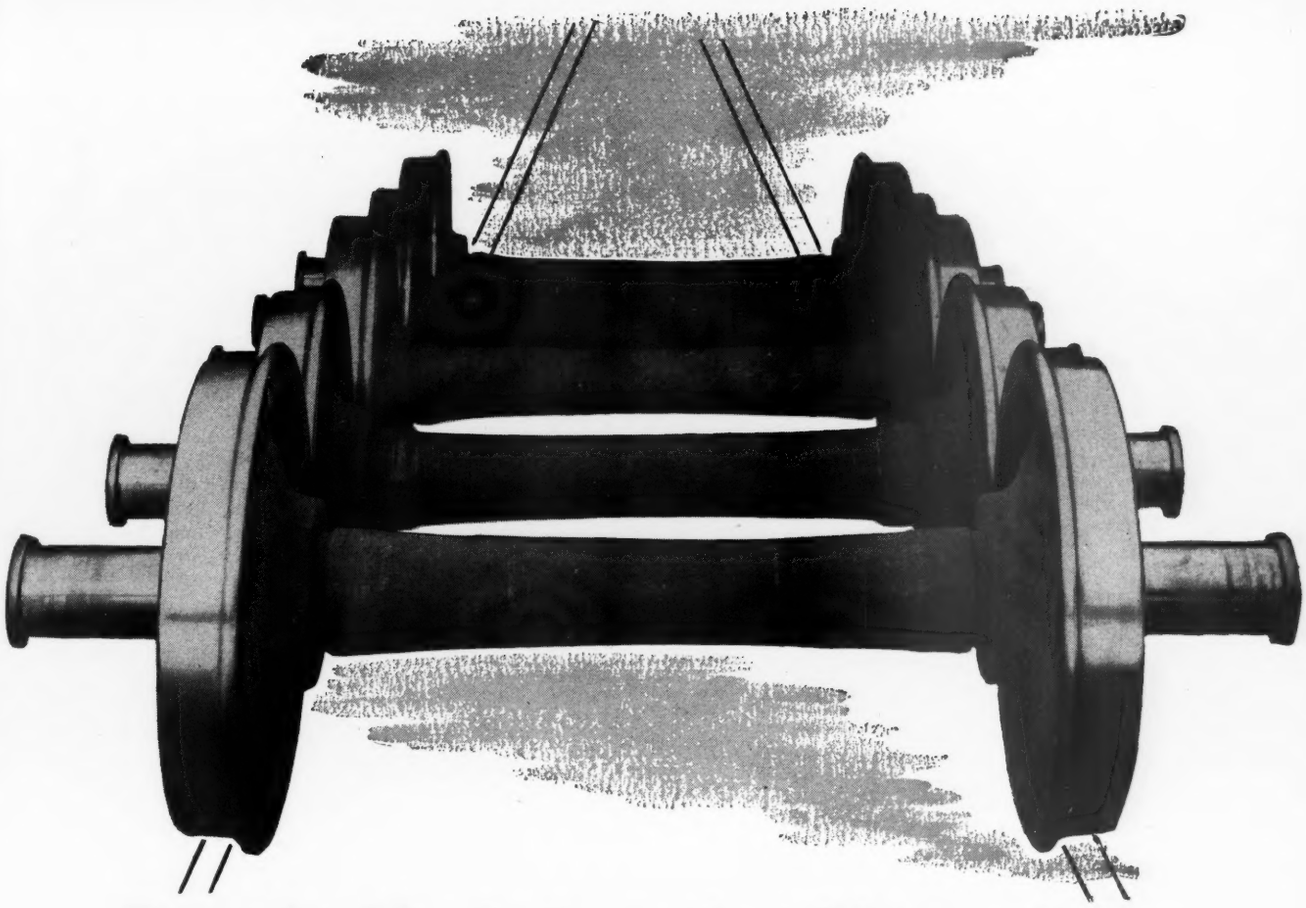
Boston & Maine.—*Stock Adjustment.*—Upon request of the applicant, the Interstate Commerce Commission has canceled a scheduled November 3 hearing in the Finance Docket No. 16250 proceeding wherein this road sought authorization to modify, pursuant to the so-called Mahaffie Act, the eight classes of its outstanding capital stock by converting such stock into one class of new common stock. The road's application was outlined in detail in *Railway Age* of August 28, page 68.

In a letter to the commission, W. S. Trowbridge, vice-president, finance and accounting, of the B. & M., said the road's application has brought forth many counter suggestions from various classes of stockholders. The proponents of the several alternative plans appear to hold their views "so strongly," he said, that the B. & M. believes no useful purpose could be served by a hearing at this time. The road, he said, will advise the commission of its future plans as soon as "we are satisfied that there is a meeting of the minds among our stockholders of such proportion as to give a fair assurance of ultimate success."

Chesapeake & Ohio.—*To Sell $40 Million of Bonds.*—The early issuance and sale of $40,000,000 of a new series of refunding and improvement mortgage bonds will be considered by the Chesapeake & Ohio's board of directors, Walter J. Tuohy, first vice-president of the road, said in Cleveland, Ohio, on October 26 before an interim regional meeting of C. & O. stockholders. "The current program of improvements to road property and equipment," he stated, "is estimated to cost $152,000,000, of which $68,000,000 is for improvement and extensions to road property and $84,000,000 for new rolling stock—cars and locomotives. The amount expended on this program prior to September 1, 1948, was $45,000,000, leaving $107,000,000 to expended in the remainder of this year and in 1949. Of this amount $36,000,000 will be spent for road property and $71,000,000 for new equipment."

To a large extent, the C. & O. officer added, "purchases of equipment have been financed through the issuance of equipment trust certificates. However, improvements to road property and extensions of line into new coal territories, as well as cash payments on delivery of new equipment, have been made with treasury funds. While this program will increase the capacity and efficiency of the company's plant and

News Department continued on next left-hand page



Turned with single tools *without grinding*

BY THE NEW PROFILING METHOD

THESE car wheel sets were turned by the new profiling method on a Niles 52" Car Wheel Lathe. Finish of the tread closely approaches that obtained by grinding, and in the opinion of railroad officials who have witnessed this operation, subsequent grinding operations are not necessary. Extreme accuracy is obtained. Use of only a single tool and elimination of grinding makes possible remarkable savings in time.

Both Niles Car Wheel and Niles Driving Wheel Lathes are now being built with the tread profiling attachment. This is an entirely hydraulic device which produces a profile on the wheel or tire tread that is an exact duplicate of the template used. Suitable speeds are provided for the use of carbide tools. The pneumatically operated self-equalizing driver dogs ensure accuracy of concentricity, and a special calipering device assists the operator in turning both wheels to exactly equal diameters.

We would like you to see a lathe with this profiling attachment in operation. For arrangements write R. S. Henninger, Lima-Hamilton Corporation, 648 Niles Ave., Hamilton, Ohio.

LIMA HAMILTON CORPORATION

DIVISIONS: *Hamilton, Ohio*—Niles Tool Works Co.; Hooven, Owens, Rentschler Co. *Lima, Ohio*—Lima Locomotive Works Division; Lima Shovel and Crane Division.

PRODUCTS: Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Locomotives; Cranes and shovels; Special heavy machinery; Heavy iron castings; Weldments.

will produce substantial savings in operating expenses, it has resulted in a reduction in the net current assets of the company during the past year of over $36,000,000. The balance sheet shows that the investment in road property and equipment increased $60,000,000 and the investment in other physical property increased $7,000,000 between August 31, 1947, and August 31, 1948. During the same period, long-term funded debt was reduced $3,497,000, and equipment obligations issued to pay for new equipment increased $24,763,000. Therefore, while the increased investment in physical properties was more than $67,000,000 funded debt increased only $21,000,000, indicating that treasury cash in the amount of $46,000,000 was applied during that period to permanent investment. The management had hoped that it would be feasible to carry on the improvement program without resorting to financing other than equipment financing. However, in the light of present circumstances the management feels it best to reimburse the company's treasury."

Delaware, Lackawanna & Western.—*Increases NKP Holdings.*—The Delaware, Lackawanna & Western has reported to the Securities and Exchange Commission that in September it purchased 1,700 shares of the common stock of the New York, Chicago & St. Louis, thereby increasing its holdings to 49,400 shares.

Lehigh Valley.—*Debt Adjustment.*—Examiner J. V. Walsh has recommended in a proposed report that the Interstate Commerce Commission approve a plan of debt adjustment for this road and its subsidiaries pursuant to the provisions of the so-called Mahaffie Act. As reported in *Railway Age* of June 26, page 135, wherein the road's proposed plan was outlined, the L. V. faces bond maturities in the next eight years of approximately $45,000,000, of which $32,500,000 are due by October 1, 1951.

Under the plan recommended by the examiner, which is substantially the same as that proposed by the road, there would be no maturity of any of the $129,708,000 of the bonds of the L. V. and its subsidiaries until 1969, with the maturities to be spaced at five-year intervals thereafter until 1994. The largest maturity of bonds presently outstanding, prior to the maturity in 2003 of the $71,754,000 of Lehigh Valley Rail Way Company general consolidated mortgage bonds, would be the $14,711,000 of that company's first mortgage 4½ per cent bonds in 1974. With the modification of interest provisions, fixed charge bond interest as of July 1 will be reduced from $6,076,748 annually to $3,756,514, or by $2,320,234. In the latter connection, the examiner noted that, if such a reduction had then been in effect, fixed charges in all but three of the last 20 years would have been earned by the L. V.

The proposed modifications with respect to the various classes of bonds are as follows:

1. $12,600,000 of L. V. consolidated mortgage annuity bonds, which have no maturity date and are not redeemable, would mature April 1, 1989, and would be made redeemable. Of the total amount, $10,062,000 would bear interest at 6 per cent and the remainder at 4½ per cent.
2. $8,268,000 of Pennsylvania and New York Canal & Railroad Co. consolidated mortgage bonds, due April 1, 1949, and bearing interest at rates varying from 4 to 6 per cent, would mature April 1, 1969, at the same rates of interest.
3. $14,711,000 of Lehigh Valley Rail Way Company first mortgage 4½ per cent bonds, due July 1, 1950, would mature July 1, 1974, at the same rate of interest.
4. $9,572,000 of Lehigh Valley Terminal Railway Company first mortgage 5 per cent bonds, due October 1, 1951, would mature October 1, 1979, at the same rate of interest.
5. $9,803,000 of Lehigh Valley Harbor Terminal Railway first mortgage 5 per cent bonds, due February 1, 1954, would mature February 1, 1984, at the same rate of interest.
6. $3,000,000 of Lehigh & Lake Erie first mortgage 4½ per cent bonds, due March 1, 1957, would mature March 1, 1994, at the same rate of interest.
7. $71,754,000 of Lehigh Valley general consolidated mortgage bonds, due May 1, 2003, would be modified so that 25 per cent of the interest thereon would remain fixed and the remainder would become contingent upon earnings. Of the bonds to be modified, $12,000,000 bear interest at 5 per cent, $20,697,000 at 4½ per cent and $39,057,000 at 4 per cent. Provision also would be made in an indenture supplemental to the mortgage for the issuance of six series of new general consolidated mortgage bonds, to be designated series A to F, inclusive.

For clarity and certainty of effect, the examiner recommended, the provisions of the plan, as respect interest immediately prior to redemption on the proposed new general consolidated mortgage bonds of series D, E and F, should be amended so that the interest for any year, or part thereof, for which available income shall not have been determined on the redemption date, shall be a fixed charge. He also recommended that 1) to insure purchase on the most favorable terms, the provisions of the plan should be amended so that such purchases may not be made at private sale; 2) to facilitate future financing, the provisions of the plan should be amended so that payments into sinking funds created after its effective date may, in the application of available income, be placed before the payment of contingent interest on the proposed new series D, E and F general consolidated mortgage bonds; and 3) for clarity and certainty of effect, the plan should be amended by express provision that no bonds or other obligations may be issued in lieu of bonds retired through sinking funds.

The plan also calls for a modification of the L. V.'s 1,600,000 shares of common stock, par value $50 per share, of which 1,210,034 shares are outstanding. It is proposed that all of the presently authorized 1,600,000 shares be changed to shares without nominal or par value and that the road's charter be further modified so that 287,016 shares of the authorized but unissued shares, so changed, will be reserved for issuance to holders of the general consolidated mortgage bonds on the basis of four shares of stock for each $1,000 in bonds. The 1,497,050 shares of common stock of no par value outstanding after such change and issuance will have an aggregate stated value the same as the aggregate par value of the 1,210,034 shares of common stock now outstanding, namely $60,501,700.

The examiner found to be erroneous allegations by intervening bondholders to the effect that the plan was "conceived, devised and formulated" by the applicants' management under direction of a board of directors elected by the Pennsylvania "which at all times has dominated the affairs of the applicants through the direct and indirect ownership of 51 per cent of the voting stock." The intervenors also alleged that the plan vests in the Pennsylvania "virtual perpetual control" over the affairs of the applicants and strengthens such control through the elimination of 75 per cent of the fixed interest requirements on the general consolidated mortgage bonds, thereby "minimizing the possibility of the bondholders taking over the assets and control" of the applicants in event of default in the payment of the full fixed interest on those bonds. Examiner Walsh, however, observed that the stock of the L. V. owned by the Pennsylvania and the Wabash is in each case held subject to a trusteeship lodging the voting power in an independent trustee.

St. Louis Southwestern. — *Bonds of Paragould Southeastern.*—This road has applied to the Interstate Commerce Commission for authority to continue to guarantee until July 1, 1990, $511,000 of Paragould Southeastern first and refunding mortgage bonds, due January 1, 1944. The P.S., a subsidiary of the guarantor, told the commission that it was unable to meet the payment of the bonds in 1944 and that the same condition still exists, thereby necessitating the proposed extension. The bonds bear interest at the rate of 5 per cent.

Seaboard Air Line.—*Alleghany Sells Bonds.*—The Alleghany Corporation has reported to the Securities and Exchange Commission that on September 24 it sold its entire holdings of $3,129,224 of Seaboard Air Line general income 4½ per cent bonds of 2016.

Wyoming.—*Reorganization.*— Division 4 of the Interstate Commerce Commission has ratified the court appointment of R. E. McNally as trustee of the property of this company.

New Securities

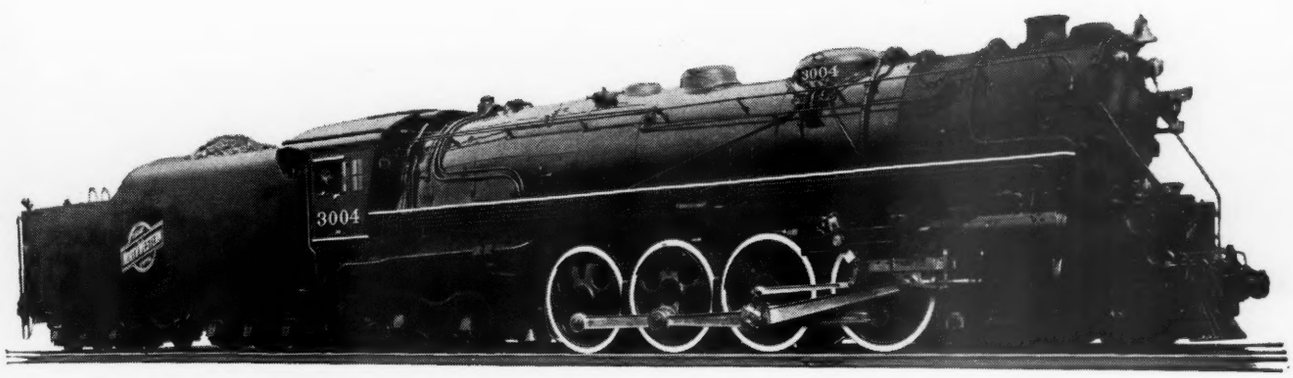
Application has been filed with the Interstate Commerce Commission by:

Atlantic Coast Line-Louisville & Nashville. — To assume joint liability for $1,320,000 of series C equipment trust certificates, which the applicants' lessor, the Clinchfield, seeks commission authority to issue. Proceeds from the sale of the certificates would be applied toward the purchase of 3 4,500-hp. Diesel-electric freight locomotives and an additional 1,500-hp. "B" unit from the

News Department continued on next left-hand page

THE NORTH WESTERN

plans for the future



The C & N W Railway has completely re-built its 35 class H locomotives — the backbone of its freight power. These Franklin devices are used on all the modernized locomotives:

- The Locomotive Booster® — Provides additional power for prompt, smooth starts — saves time and reduces damage to equipment and lading. Gives reserve power for ruling grades and adverse operating conditions.
- Automatic Compensators and Snubbers — Protect the roller bearing boxes. Reduce pounds, minimizing wear and failure of crank pins and rod bearings. Cushion roller bearing assemblies from abnormal shocks. Extend tire mileage.
- Type E-2 Radial Buffer — Makes engine ride more smoothly. Cuts down shake and bounce and reduces maintenance of many related parts.
- Franklin Butterfly Firedoor — The low-maintenance firedoor.

FRANKLIN RAILWAY SUPPLY COMPANY

A CORPORATION

NEW YORK • CHICAGO • MONTREAL

STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER • POWER REVERSE GEARS
AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION

Electro-Motive Division of the General Motors Corporation at an estimated total cost $1,665,500. The certificates, to be sold on the basis of competitive bidding, would be dated November 1 and would mature in 15 annual installments of $88,000, starting November 1, 1949.

New York, Chicago & St. Louis.—To assume liability for $4,600,000 of equipment trust certificates, proceeds of which would be applied toward purchase of the following equipment:

Description and Builder	Estimated Unit Price
400 70-ton, steel, low-side, drop-end gondola cars (American Car & Foundry Co.)	$5,455
10 Class S-3 type 2-8-4 steam freight locomotives, (Lima-Hamilton Corporation)	224,900
4 1,000-hp. Diesel-electric switching locomotives (Lima-Hamilton)	102,000
9 1,000-hp. Diesel-electric switching locomotives (Electro-Motive Division, General Motors Corporation)	103,045

The certificates, to be sold on the basis of competitive bidding, would be dated December 1 and mature in 20 semi-annual installments of $230,000, starting June 1, 1949.

Division 4 of the I.C.C. has **authorized:**

Central of New Jersey.—To assume liability for $1,500,000 of series A equipment trust certificates, the proceeds of which will be applied toward the purchase of 13 1,500-hp. Diesel-electric "all purpose" locomotives, as described in *Railway Age* of October 2, page 70. The equipment will be acquired from Fairbanks, Morse & Co. The certificates will be dated October 15 and will mature in 15 annual installments of $100,000, starting October 15, 1949. The report also approves a selling price of 99.5379 with a 2⅝ per cent interest rate, the bid of Harris, Hall & Co., and associates, on which basis the average annual cost will be approximately 2.70 per cent.

Chicago & North Western.—To assume liability for $5,325,000 of equipment trust certificates, proceeds of which will be applied toward purchase of equipment estimated to cost $6,672,340, as described in *Railway Age* of September 11, page 90. The certificates will be dated November 1 and will mature in 15 annual installments of $355,000 starting November 1, 1949. The report also approves a selling price of 99.439 with a 2⅜ per cent interest rate, the bid of Kidder, Peabody & Co., on behalf of itself and Dick & Merle-Smith and the Lee Higginson Corporation, on which basis the average annual cost will be approximately 2.46 per cent. The certificates were reoffered to the public at prices yielding from 1.6 per cent to 2.525 per cent, according to maturity.

Virginian.—To issue not exceeding $9,500,000 of series C 3¼ per cent first-lien and refunding mortgage bonds, the proceeds of which will be applied toward the payment of the road's short-term bank loans amounting to $4,000,000 and toward restoring its cash working capital. At the same time, the road also has been authorized to procure the authentication and delivery of not exceeding $6,448,000 of additional series C bonds and to pledge and repledge them in whole or in part from time to time as collateral security for short-term notes.

The bonds will be dated October 1 and will mature October 1, 1973. They will be redeemable at 103½ if redeemed in the 12 months ending September 30, 1949, decreasing each year thereafter to 100 if redeemed in the 12 months ending September 30, 1973. They also will be redeemable for sinking fund purposes.

The commission's report also approves a selling price of 99.885 with a 3¼ per cent interest rate, the bid of Shields & Co., and associates, on which basis the average annual cost will be approximately 3.26 per cent.

Dividends Declared

Atlantic Coast Line.—$1.00, payable December 13 to holders of record November 15.

Louisville & Nashville.—88¢, quarterly, payable December 13 to holders of record November 1.

Western Maryland.—7% 1st preferred (accum.), $7.00, payable November 20 to holders of record November 5.

Average Prices Stocks and Bonds

	Oct. 26	Last week	Last year
Average price of 20 representative railway stocks	50.12	49.27	48.33
Average price of 20 representative railway bonds	88.54	88.72	87.10

RAILWAY OFFICERS

EXECUTIVE

William J. MacGreevy, whose appointment as vice-president of the Southern departments of the Railway Express Agency at Atlanta, Ga., was reported in the *Railway Age* of September 25, began his express career as a clerk in the New York office of Wells Fargo & Co. Express in 1908. He served successively as cashier in the local express

William J. MacGreevy

office in Decatur, Ill., express agent at Louisville, Ky., and route agent at Canton, Ohio. During the first World War, Mr. MacGreevy was named secretary to the operating vice-president of the Central region at Chicago, later becoming assistant to the operating vice-president. Mr. MacGreevy later served two years as superintendent of the Los Angeles division and a similar period as general manager of the Trans-Missouri department at Omaha, Neb., transferring to the Ohio Valley department at Cincinnati, Ohio, in 1937. Mr. MacGreevy has been on the staffs of the operating vice-presidents at Chicago and San Francisco and during that time has served on the Express Agency's Committee on Personnel and Labor Relations.

Joseph F. Scherman, whose appointment as assistant to vice-president of the Railway Express Agency at Chicago, was reported in the *Railway Age* of October 16, was born on July 6, 1886, at Brainerd, Minn. Mr. Scherman began his career with R. E. A. and its predecessor companies in 1900, at St. Paul, Minn., subsequently holding various positions until 1936, when he became chief clerk to superintendent at St. Paul. He was advanced to route agent at Fargo, N. D., in 1937 and to chief clerk to the general manager at St. Paul in 1939. Mr. Scherman went to Duluth, Minn., in 1940 as superintendent, and was appointed superintendent of organization at Chicago in 1944. He was serving in the latter post at the time of his recent appointment.

Peter J. Schardt, assistant vice-president in charge of mail and express traffic of the Southern system at Washington, D. C., has retired after more than 25 years of service, but will continue as chairman of the Committee on Railway Mail Transportation. **Marshall D. White** has been appointed assistant to vice-president in charge of mail and express traffic, with headquarters at Washington.

Jay C. Jaspar, assistant to the general auditor of the Southern Pacific, has been advanced to executive assistant to the president at San Francisco, Cal.

Eugene H. Hite, superintendent of the Railway Express Agency at Los Angeles, Cal., has been appointed assistant to vice-president, in charge of personnel and labor relations, with headquarters at San Francisco, Cal. He succeeds **W. J. MacGreevy,** whose appointment as vice-president, Southern department, at Atlanta, Ga., was reported in the *Railway Age* of September 25.

FINANCIAL, LEGAL and ACCOUNTING

H. W. Watson, assistant auditor of the Chicago & Illinois Midland, has been elected auditor at Springfield, Ill., succeeding **C. I. Hagberg,** who has relinquished the post because of ill health. Mr. Watson was born at Ottumwa, Iowa, on January 21, 1890. He entered railway service in 1907 as a train crew call-boy with the Chicago, Burlington & Quincy in his home town, continuing with that company in various capacities until 1912. In that year he entered the

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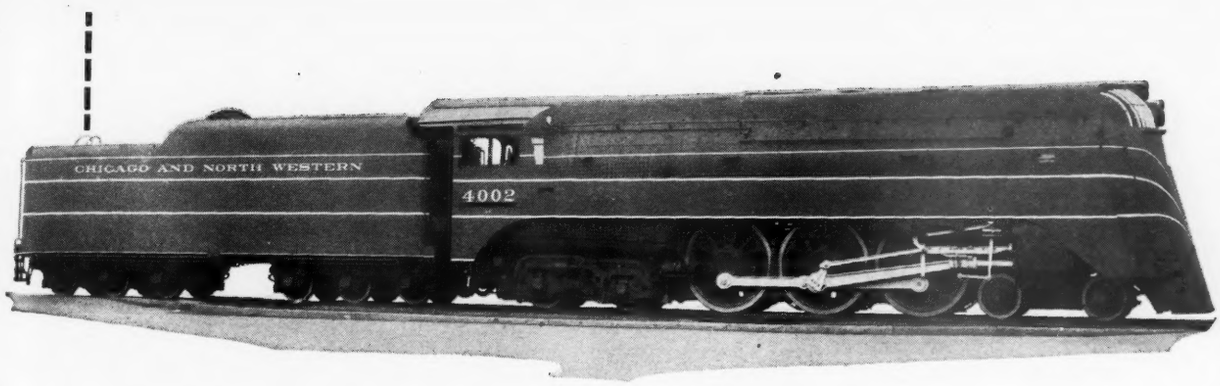


Security "Dutch Ovens"

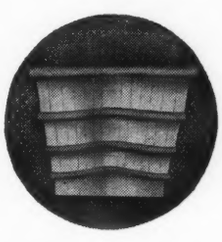
in C. & N. W. Oil-Burning Locomotives

Recently a new type pre-combustion chamber or Security "Dutch Oven" has been adopted as standard equipment for C. & N. W. oil-burning locomotives operating between Chicago and Omaha.

The Security "Dutch Oven" is located at the oil-burning nozzle end of the firepan. The radiation from the hot refractory surface of the oven chamber flashes the atomized oil as it travels along the center of the firepan. This increases efficiency of combustion, reduces carbon formation, and results in a better steaming boiler.

For nearly forty years the Chicago & North Western has been using the Security brick arch as standard equipment in coal-burning locomotives.

HARBISON-WALKER REFRACTORIES CO.
Refractories Specialists



AMERICAN ARCH CO. INC.
60 East 42nd Street, New York 17, N. Y.
Locomotive Combustion Specialists

service of the Chicago, Peoria & St. Louis in Springfield, as statistician in the operating department. With the exception of military service during 1917 and 1919, he has remained continuously in the service of that company and its successor, the Chicago & Illinois Midland. In June, 1938, he was advanced to the position of chief clerk, accounting department, and in April, 1944, was elected to the position of assistant auditor.

E. C. Lewis, freight claim agent of the Great Northern at St. Paul, Minn., has retired following 53 years of service with the road. **F. F. Lenihan,** chief grain claims clerk, and **A. R. Lewis,** chief clerk in the office of general freight claim agent, have been appointed assistant freight claim agents.

O. G. Edwards, assistant general solicitor of the Chicago, Milwaukee, St. Paul & Pacific, has been appointed assistant general counsel, with headquarters at Chicago.

OPERATING

W. V. Keith, assistant general superintendent of the St. Louis Southwestern at Tyler, Tex., has been promoted to general superintendent at that point, succeeding **George B. Matthews,** who has been advanced to vice-president at St. Louis, Mo. Mr. Keith is succeeded by **Leon C. Albert,** assistant superintendent of rules and safety.

E. H. Bailey, assistant superintendent of the Union Pacific at Denver, Colo., has been appointed superintendent of the Wyoming division at Cheyenne, Wyo.

TRAFFIC

Charles M. Lampman, commercial agent of the Minneapolis & St. Louis' Minnesota transfer office at St. Paul, Minn., has been appointed general agent at that office. He succeeds the late **George W. Lee,** whose death on September 18 was reported in the *Railway Age* of October 2.

R. E. Maloney, general agent of the Illinois Terminal at Milwaukee, Wis., has been transferred to Kansas City, Mo., succeeding **L. H. McGarry,** who has resigned. Mr. Maloney is succeeded by **J. G. LaFleur.**

B. D. Johnston has been appointed general agent of the Chicago & Eastern Illinois at Louisville, Ky., succeeding the late **Russell Houston.**

Newton W. Guice has been appointed general agent of the Norfolk Southern at Birmingham, Ala.

S. E. Mulliken has been appointed general freight agent of the Akron, Canton & Youngstown at Akron, Ohio, succeeding **J. A. Beech,** whose promotion to assistant traffic manager was reported in the *Railway Age* of June 12, page 76. **John P. Monks** has been appointed general agent at New York, succeeding **Roy A. Ross,** who has resigned to accept employment with another company.

E. S. Center, Jr., has been appointed general development agent of the Atlanta & West Point, the Western of Alabama and the Georgia, at Atlanta, Ga., with jurisdiction over industrial and agricultural development.

Robert H. Harding, whose promotion to assistant freight traffic manager of the Chicago, Milwaukee, St. Paul & Pacific at Chicago, was reported in the *Railway Age* of October 2, was born on January 28, 1903, at Kansas City, Kan. He first entered railroad service in 1920, advancing to city freight agent at Kansas City in 1927, and to travel-

Robert H. Harding

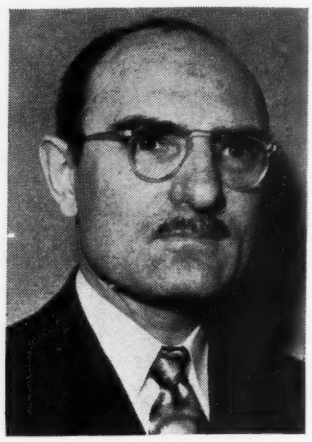
ing freight agent in 1930. Mr. Harding served as division freight and passenger agent at Terre Haute, Ind., from 1941 to February, 1948, at which time he was advanced to assistant general freight agent at Milwaukee, Wis. He was holding the latter position at the time of his recent appointment.

MECHANICAL

E. L. Hyatt has been appointed superintendent of shop, West Springfield Diesel shop of the New York Central system, with headquarters at West Springfield, Mass. **C. L. Hall** has been appointed assistant superintendent electric equipment at Harmon, N. Y.

Herman I. Anderson has been appointed acting superintendent of shops, Missouri Pacific, with headquarters at North Little Rock, Ark., succeeding **John P. Whalen,** who has been granted a sick leave.

M. C. Haber, whose appointment as general mechanical engineer of the Union Pacific, with headquarters at Omaha, Neb., was reported in the *Railway Age* of September 18, first entered U. P. service in 1922 as a tracer in the motive power department at Omaha. Mr. Haber later served as draftsman and engineer of road tests, and in 1936 was appointed mechanical engineer. He was further advanced in



M. C. Haber

1946 to assistant general mechanical engineer, the post he held at the time of his recent appointment.

PURCHASES and STORES

Irvin H. Lance, general storekeeper of the Delaware, Lackawanna & Western at Scranton, Pa., will retire on October 31, after 47 years of service. Mr. Lance's duties will be assumed, in addition to those connected with company purchases, by **Curtis F. Bayer,** purchasing agent, who will become manager of purchases and stores, with headquarters at New York. **Daniel E. Muldoon,**

Curtis F. Bayer

superintendent of the dining car department, has been promoted to assistant manager of purchases and stores, and will be succeeded by **R. H. Lloyd,** chief clerk of the stores department. **Victor E. Johnson,** storekeeper of the Keyser Valley car shops at Scranton, will be advanced to assistant to the manager of purchases and stores.

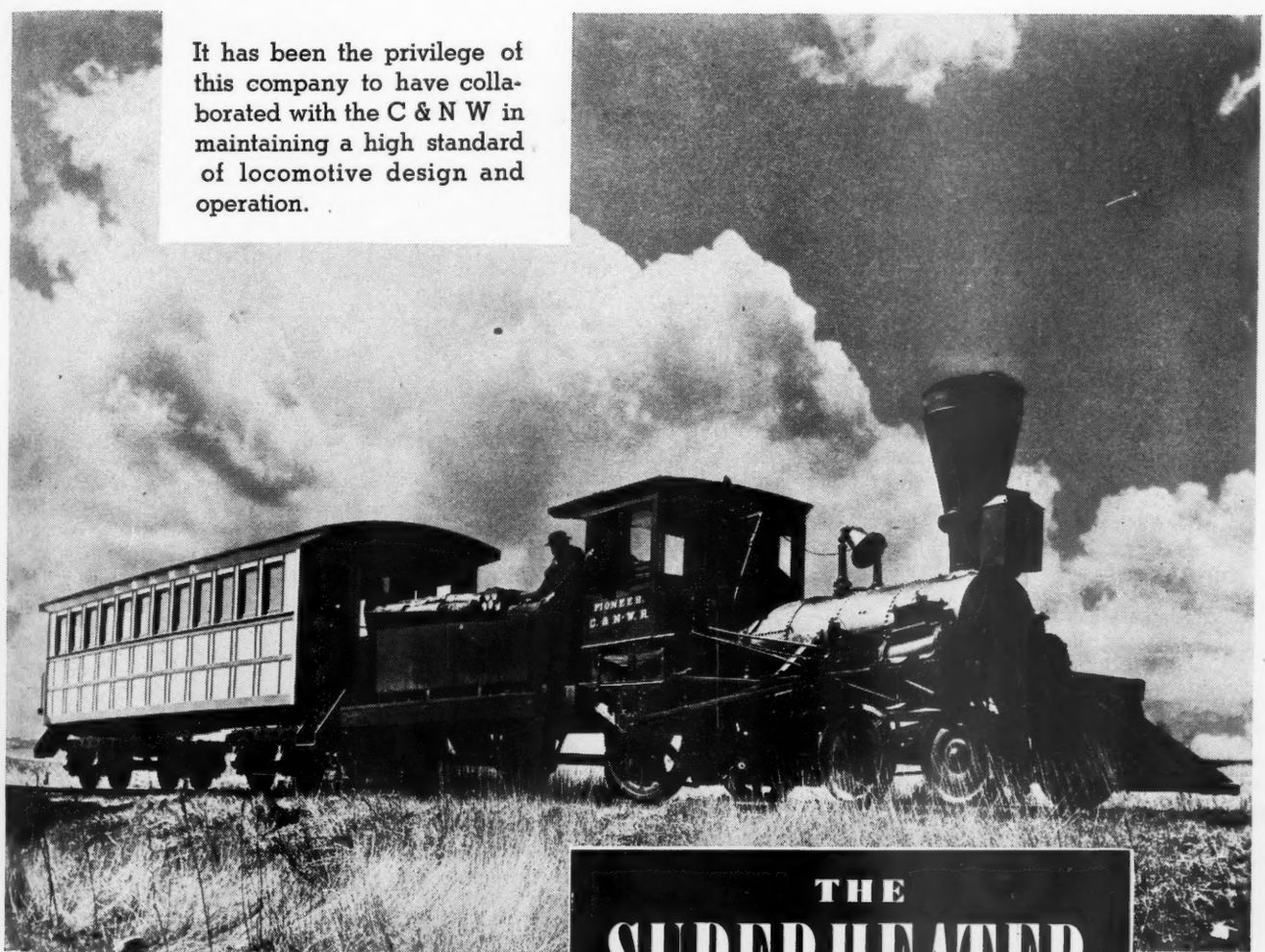
Mr. Lance entered the service of the Lackawanna on August 1, 1901, in the tie and timber department at Washing-

News Department continued on next left-hand page

100 Years of RAILROAD *Progress*

by CHICAGO AND NORTH WESTERN SYSTEM *. . . Congratulations!*

It has been the privilege of this company to have collaborated with the C & N W in maintaining a high standard of locomotive design and operation.



THE NATIONAL GUARD DEFENDS AMERICA

THE SUPERHEATER COMPANY

Representative of AMERICAN THROTTLE COMPANY, INC.
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Montreal, Canada, THE SUPERHEATER COMPANY, LTD.

A-1916 (3120)

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ton, N. J. In October, 1902, Mr. Lance transferred to the general roadmaster's office at Hoboken, N. J., where he was appointed storekeeper in December, 1907. Four years later he transferred to the purchasing department at New York. He was promoted to general storekeeper at Scranton on September 1, 1918.

Mr. Bayer, a graduate of Lehigh University, entered railroad service with the D. L. & W. in 1935 as inspector of dining car service. In 1936, he became transportation inspector and special representative on the staff of the general superintendent at Scranton. While thus employed, Mr. Bayer also served as traveling passenger representative, acting superintendent of the dining car department, supervisor of safety, and supervisor of freight claim prevention. In 1941, he became assistant superintendent of the dining car department, then, in the same year, superintendent. He was appointed assistant purchasing agent in September, 1945, and became purchasing agent on January 1, 1946.

ENGINEERING and SIGNALING

William A. Fairbanks will retire on December 31 as secretary of the Communications section of the Association of American Railroads. A photo of Mr. Fairbanks and a brief announcement of his retirement plans appeared in the *Railway Age* of October 9, page 68, in connection with a feature article covering the section's recent annual meeting. He was born on July 13, 1888, at Jersey City, N. J., and, following attendance at business college, entered the service of the American Railway Association (now A. A. R.) on January 1, 1909, as a clerk-stenographer. He was subsequently promoted to assistant chief clerk, and, on September 1, 1918, was appointed secretary of the New York District Conference Committee of the United States Railroad Administration. On March 1, 1919, he was appointed assistant to general secretary and treasurer of the A. R. A. Mr. Fairbanks was appointed secretary of the Telegraph and Telephone section of the A. R. A. (now Communications section, A. A. R.) on December 8, 1920, which position he has held to date, and will hold until his retirement on December 31. His retirement will mark 40 years' affiliation with the A. A. R. and its predecessor.

G. W. Miller, district engineer of the Ontario district of the Canadian Pacific, has been appointed assistant engineer maintenance of way of the Eastern region, with headquarters as before at Toronto, Ont., succeeding **J. R. Caswell,** transferred.

H. J. Fast, division engineer of the Canadian National at Levis, Que., has been appointed district engineer of the Northern Ontario district at North Bay, Ont., succeeding **W. H. B. Bevan,** who has retired on pension. **E. T. Gove,** assistant district engineer at North Bay, has been appointed division engineer of the London division at London, Ont., succeeding **G. L. Plow,** transferred. **J. F. Davison,** assistant engineer of the Northern Ontario district, has been appointed division engineer of the Levis division, succeeding Mr. Fast.

James P. Bolling, formerly assistant supervisor of bridges and buildings of the Louisville & Nashville at Mobile, Ala., has been appointed assistant division engineer at Louisville, Ky. He succeeds **Robert B. Lindsey,** who has been transferred to the office of chief engineer at Louisville.

T. B. Hutcheson, assistant division engineer of the Seaboard Air Line at Raleigh, N. C., has been appointed assistant to chief engineer at Norfolk, Va., replacing **J. H. Gill,** who has resigned after approximately 24 years of service to engage in private business in Starke, Fla. Mr. Hutcheson is a graduate of Virginia Polytechnic Institute. He joined the Seaboard in 1935 and served at Tampa, Fla., Savannah, Ga., and Atlanta, until 1942, when he entered military service. After his discharge in 1948, with the rank of major, he returned to the Seaboard.

T. B. Hutcheson

Mr. Gill was born in Franklin county, N. C., and entered the service of the Seaboard in 1925 at Raleigh, subsequently serving at Jacksonville, Fla.; Richmond, Va.; Monroe, N. C., and Hamlet; Atlanta, Savannah, and Norfolk.

Donald E. Brunn, engineer maintenance of way of the Toledo, Peoria & Western, has been appointed assistant engineer, with headquarters as before at Peoria, Ill. The position of engineer maintenance of way has been abolished.

Randle O. Egbert, of the engineering firm of Sverdrup & Parcel, of Chicago and former assistant engineer of the Ann Arbor and the Wabash at St. Louis, Mo., has been appointed assistant engineer of the T. P. & W. at Peoria, supervising government construction of the new railroad in the Farm Creek area.

J. E. Tiedt, engineer of water service, Chicago, Rock Island & Pacific at Chicago, has also been appointed work equipment supervisor.

Samuel Murray, resident engineer of the Northwestern district of the Union Pacific at Portland, Ore., will retire on November 1, after 46 years of railway service. Mr. Murray plans to enter private engineering practice in Portland.

SPECIAL

Harry B. Spurrier, former Chicago newspaperman, has been named a public relations representative of the New York Central system, with headquarters at Cleveland, Ohio.

F. F. Forbes, scrap plant foreman of the Erie, has been appointed supervisor of the scrap and reclamation plant at Meadville, Pa., replacing **J. J. Collins,** who recently resigned.

OBITUARY

Russell Houston, general agent of the Chicago & Eastern Illinois at Louisville, Ky., died recently.

Roy Wallace Clark, late vice-president in charge of traffic of the Northern Pacific, with headquarters at St. Paul, Minn., whose death was reported in the *Railway Age* of October 9, was born on October 4, 1880, at Petoskey, Mich. Mr. Clark attended Detroit Business University and entered railroad service with the N. P. in 1902 as stenographer to chief engineer. He subsequently served as stenographer in the office of the president and as chief clerk until 1907, when he was appointed assistant to president. He was further advanced to general traffic manager in 1927, and in 1938 was promoted to vice-president in charge of traffic, which post he held at the time of his death.

Roy Wallace Clark

HUNT-SPILLER MFG. CORPORATION

Memo To: Chicago & Northwestern Railway
From: One Veteran to Another

1848

The 12 year old second-hand "Pioneer" makes its first trip over the newly-laid strap rails of the Galena and Chicago Union. In South Boston, Cyrus Alger is already a veteran foundryman, having for 38 years manufactured the superior Air Furnace Gun Iron which is destined to become an important locomotive material.

1893

World's Columbian Exposition. The Galena and Chicago Union has long ago outgrown its name and is now the Chicago and Northwestern. Forty-five years old, it operates 4,200 miles of line. Cyrus Alger's firm too has a new name, Hunt-Spiller Manufacturing Corporation, and is becoming known in the railway field. One of the Fair's sensations, The 999, makes its phenomenal and long-standing speed record on driving wheel centers made from Hunt-Spiller Air Furnace Gun Iron.

1933

Chicago's Century of Progress Exposition, an affirmation of confidence in a time of travail. The Chicago and Northwestern has reached a mature 85 years, and the Air Furnace Gun Iron pioneered 123 years ago by Alger, is used on practically all important roads, including the Northwestern.

1948

WELCOME, CHICAGO AND NORTHWESTERN, to the Ancient and Honorable Order of Centenarians! Hunt-Spiller, one of the senior members, hopes that your second hundred years will be even more satisfying and productive than the first.

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Vice President and
General Manager

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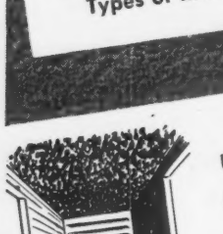

Used as a ceiling finish instead of plywood.—It's better—costs much less.

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General News

C.A.B. Orders Suspension, Probe Of Reduced Air Freight Tariffs

The Civil Aeronautics Board has suspended for 90 days, pending further investigation, tariffs filed by nine air lines, including two non-scheduled carriers, which proposed to reduce their freight rates to the minimum level of 16 cents per ton-mile for the first 1,000 ton miles in any one shipment and 13 cents per ton-mile for all ton-miles in excess of 1,000 miles in any one shipment. Such minima were prescribed by the C.A.B. earlier this year, as reported in *Railway Age* of May 1, page 53.

The C.A.B.'s October 18 order suspending the tariffs came as a result of complaints filed by Slick Airways, Inc., and The Flying Tiger Line, Inc., the two non-scheduled carriers whose tariffs were suspended, which asserted that the scheduled carriers would be carrying freight at a loss if the new rates became effective.

15 Air Lines Ask Court Review Of Freight Forwarder Decision

Fifteen scheduled air lines have asked the United States Circuit Court of Appeals in Chicago to review a September 8 order of the Civil Aeronautics Board which authorized 55 air freight forwarders to operate as indirect air carriers in the transportation of property by air for a period not to exceed five years. The C.A.B.'s order, which included the denial of similar authority sought by three railroad affiliates, was noted in *Railway Age* of September 18, page 74.

The C.A.B., the carriers contend, improperly authorized the forwarders to operate on an experimental basis and reached its decision without making appropriate findings as to whether authorization of freight forwarders in air transportation will result in an economically sound air transport industry.

In authorizing air freight forwarders, the carriers assert, the C.A.B. has "committed . . . errors of law in connection with its determination to superimpose on the direct air carriers a completely new and competitive system of indirect air carriers not engaged in the operation of aircraft . . ."

Westinghouse Forms Atomic Power Division

Gwilym A. Price, president of Westinghouse Electric Corporation, has announced formation of an atomic power division which will concentrate solely on the harnessing of nuclear energy for production of useful power.

According to Mr. Price, the new division "will be available to undertake atomic energy projects for the United States Government as well as

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to carry on independent studies. It will conduct research, development, engineering, and any necessary associated construction." It will work closely with the Westinghouse Research Laboratories and with other divisions of the company so as to benefit from their knowledge, experience, and facilities. Location and other details of organization will be announced later.

Manager of the division will be Charles H. Weaver, who has recently served as industrial manager of the company's central district at Pittsburgh, Pa.

Mr. Weaver was graduated from the University of Pennsylvania in 1936 and joined Westinghouse that same year. During the war he served as manager of the Westinghouse marine department which, from 1945 on, included aviation activities also.

Railway Business Women Plan Home for Retired Members

First step toward establishment of a home for retired members of the National Association of Railway Business Women was completed on October 12, with announcement at Minneapolis, Minn., that a fund of $4,500 has been raised to finance a study of possible sites and other preliminary arrangements for the project. Katherine Whalen, Buffalo, N. Y., is chairman of the group making the study.

National Power Show

Exhibits covering every phase of power production and application will be presented at the Eighteenth National Exposition of Power and Mechanical Engineering to be held in the Grand Central Palace, New York, from November 29 to December 4, coincident with the annual meeting of the American Society of Mechanical Engineers. The major categories in which the exhibits may be classified are heat and power production, means of distribution, auxiliary units, automatic controls, transmissions, materials handling, engineering materials, and special machinery and tools. Innovations and improvements introduced since the Seventeenth National Power Show in 1946 are included in all of the classifications. Admission is by invitation and registration. The general public is not admitted.

August Truck Traffic

Motor carriers reporting to the American Trucking Associations transported in August 2,826,583 tons of freight, an increase of 7.9 per cent over the July total of 2,618,747 tons and an increase of 18.9 per cent over the 2,376,826 tons hauled in August, 1947. The A. T. A. index number, based on the 1938-40 average monthly tonnage of the reporting carriers, was 237.

The August figures, according to the A. T. A., are based on comparable reports from 288 carriers in 43 states.

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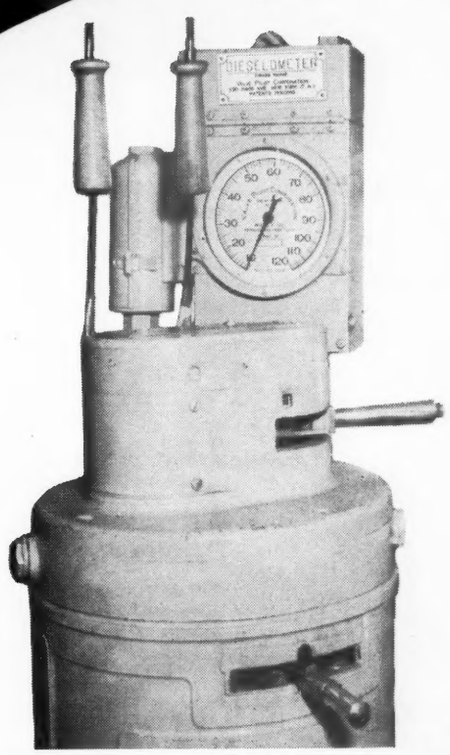

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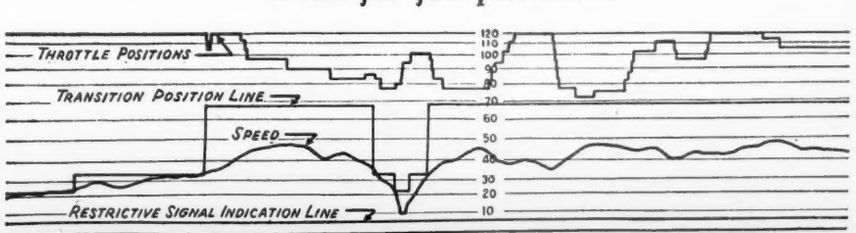

VALVE PILOT CORPORATION
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Carriers in the Eastern district reported increases of seven per cent above July and 16.2 per cent over August, 1947; carriers in the Southern region reported respective increases of 18.1 per cent and 26.9 per cent; and carriers in the Western district reported increases of 6.1 per cent and 20.8 per cent, respectively.

Want Hearing on Ex Parte 168 Motion for Interim Rate Hike

The National Industrial Traffic League and the National Association of Railroad and Utilities Commissioners have asked the Interstate Commerce Commission not to grant without hearings the railroad motion for an immediate increase of 8 per cent in freight rates as a measure of interim relief while the commission considers the carriers' Ex Parte 168 application for a 13 per cent increase. Others replying to the motion, including the Secretary of Agriculture, have asked that the interim-relief motion be denied.

As noted in the *Railway Age* of October 16, page 74, the motion, filed October 12, asked immediate authority to publish on one day's notice tariffs embodying the proposed interim increase. At the same time, it went on to request hearing or oral argument during October—if the commission concluded that either should be held "as a condition to the granting of the interim relief." When this issue went to press, the commission had not acted on the motion; but it has set the basic petition for hearing November 30.

The N. I. T. League does not want that hearing advanced, but its request for hearing on the interim-relief phase said that it would not object if such hearing were held before November 30. The state commissioners' association opposes any earlier hearing date than November 30 on the interim-relief motion.

National Bearing Division Opens New Non-ferrous Foundry

The opening of the latest of six new postwar plants was announced by the American Brake Shoe Company with an inspection tour attended by representatives of daily and business papers, on October 20. The plant, a non-ferrous foundry of the National Bearing Division, is located at Meadville, Pa., and replaces four old plants, one at Meadville, two at Pittsburgh, Pa., and one at Jersey City, N. J. It has a melting capacity of 200,000 lb. a day and pours copper and a variety of brasses and bronzes, averaging 12 different alloys a day. It has floor space amounting to nearly four and one-half acres under one roof and produces a general line of blast-furnace castings, steel-mill bearings, and industrial non-ferrous parts. These include steam-locomotive crown bearings, axle and armature bearings for traction motors, and Diesel engine bearings. The plant includes facilities for pattern making, core making, and molding, with complete mechanized systems of sand handling and machine molding. Particular attention has been paid to ventilation and dust collection.

The machine shop has a total area of 36,400 sq. ft. of floor space, in which are installed 97 machine tools arranged so that parts produced in quantities can be finished on a production-line basis. The plant has a production engineering staff and chemical and physical laboratories in which complete check analyses are made of all raw materials prior to melting, and of the finished products.

Speed Up St. Louis-Mexico City Passenger Service November 1

A new expedited service which cuts a full night's travel from the present schedule between St. Louis, Mo., and Mexico City, Mex., will be inaugurated on November 1, by the Missouri Pacific and the National of Mexico. Reduction of the overall time will be accomplished principally through speeding up customs and immigration procedures at the border and by shortening the running time between Nuevo Laredo, Tam., and Mexico City.

Passengers will ride the streamlined "Texas Eagle" between St. Louis and San Antonio, Tex., at which point they will transfer to the "Sunshine Special" for the journey to Mexico. To expedite border procedures, immigration inspections on the northbound trip will be made aboard the train while enroute. The National of Mexico will provide passengers with the necessary declaration forms to be filled out before the train reaches the border.

The new schedule calls for departure from St. Louis at 5:30 p. m., with arrival in San Antonio at 11:45 a. m. the following day; in Laredo, Tex., at 6 p. m.; and in Mexico City at 8:30 p. m. the third day. Northbound, departure from Mexico City will be at 7 a. m., with arrival in Nuevo Laredo at 7:30 a. m. the following day; in San Antonio at 1:30 p. m.; and in St. Louis at 8:30 a. m. the third day.

B. & O. to Dieselize Switching Operations in Pittsburgh

The Baltimore & Ohio will completely Dieselize its switching operations in Pittsburgh, Pa., it was announced this week. Three new Diesel-electric switching locomotives, the first of 25 being built by the Baldwin Locomotive Works, were placed in service in the road's Glenwood yard on October 27. Five more of the new switching locomotives are to be delivered within a week. Thirteen will be delivered in November and the last four in December. The new locomotives will replace 35 steam engines now used for switching service at B. & O. yards in the Pittsburgh Terminal area.